
OCCUPATIONAL HEALTH AND SAFETY PROGRAM PLAN

**COUNTY OF FAIRFAX
FIRE AND RESCUE DEPARTMENT
HEALTH PROGRAMS SECTION
4100 CHAIN BRIDGE ROAD
FAIRFAX, VIRGINIA 22030**

JULY 1997

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Occupational Health and Safety Program

Fire and Rescue Department

Fairfax County, Virginia

GOAL

The Fairfax County Fire and Rescue Department will operate an Occupational Health and Safety Program to ensure a physically and mentally healthy workforce and thus minimize occupational injuries, disability retirements and workers' compensation costs, while complying with occupational health and safety regulatory requirements.

INTRODUCTION

The government of Fairfax County is instrumental in determining the quality of life for citizens of the County. A key element in quality of life is that of public safety. Meeting the public safety needs of residents is an important responsibility and it is one which the County meets very well. Much of the success of the County in providing necessary public safety services is due to the performance of the Fairfax County Fire and Rescue Department. Indeed, the excellence of the services provided by the Fire and Rescue Department is reflected in periodic requests for specialized assistance from other states and other parts of the world.

Demands placed on the Fairfax County Fire and Rescue Department are imposing. The County is large, covering approximately 400 square miles, and has a population rapidly approaching one million. Different regions within the County have different growth dynamics, ranging from densely populated areas with high-rise structures to rural sections with widely dispersed buildings. Uniformed Fire and Rescue Department personnel may be faced with diverse emergencies ranging from emergency medical services, to a blaze in a crowded office building, to a vehicle fire on a dark rural road, to a water rescue from a river or a lake.

Fairfax County Fire and Rescue Department

The Fairfax County Fire and Rescue Department is one of the largest such organizations in the Washington Metropolitan Area and in the Commonwealth of Virginia. The Fire and Rescue Department is organized in six battalions with 34 fire stations and includes 19 Advanced Life Support ambulances. The Department is staffed by more than 1100 career uniformed fire and rescue personnel, 400 volunteer fire and rescue personnel, and 100 support staff.

Public safety services provided by the Fire and Rescue Department are many. Most notable are direct responses to emergency situations. In fiscal year 1996, 66,299 emergency calls were dispatched. Of these, 72.3 percent were for emergency medical services. The majority of the remainder were calls for fire suppression incidents. Other incidents, though fewer in number, were for emergencies such as water rescue and management of hazardous materials incidents.

Other public safety services provided by the Fire and Rescue Department are directed toward prevention and education. Department personnel inspect office buildings and other structures for fire safety, instruct in life saving procedures such as CPR, and offer safety education to the public. In 1995, for example, roughly 10,000 hours of community education was provided at fire stations.

Occupational Health and Safety Support

The working conditions of fire and rescue personnel can place them in emergency situations requiring the utmost in mental concentration and physical strength. In life-threatening circumstances, a uniformed Fire and Rescue Department employee may need all of his/her skills, both mental and physical, to deal with the situation successfully.

Uniformed fire and rescue employees must be able to move heavy equipment and hoses as well as climb ladders while wearing bulky and weighty gear. He/she must recognize dangers at the scene such as toxic vapors and smoke and immediately employ proper safety procedures and systems to maximize personal protection. An emergency medical service provider must be able to evaluate a situation and, as necessary, move individuals of considerable weight to safer locations and to ambulances.

The County government and Fire and Rescue Department are well aware of the physical and mental requirements for fire and rescue personnel. The County continually is reviewing these requirements and considering new and improved means for enhancing the health and safety of its most valuable asset - the employee. An Occupational Health and Safety Program has been developed by the County to ensure proper health and safety support for uniformed Fire and Rescue Department personnel.

The Occupational Health and Safety Program provides guidance, management oversight, data and communications, and medical services for early detection and prevention of job-related illness and injury. Medical services range from assessing the mental and physical health of a candidate/applicant and the periodic assessment of the health and well-being of incumbents to the medical monitoring and surveillance of incumbents exposed and potentially exposed to occupational hazards. An integrated Safety Program incorporating the elements of surveillance and monitoring, prevention, risk reduction, mandated reporting, education and training also is part of the Occupational Health and Safety Program. An organization chart showing the different responsibilities of the Fire and Rescue Department Occupational Health and Safety Program is provided in Figure 1.

Figure 1. OHSP Organization Chart

The Fairfax County Fire and Rescue Department Occupational Health and Safety Program has eight major components. These components are modeled after National Fire Protection Association (NFPA) standards (NFPA 1500 and 1582) and include elements which recognize and meet Federal and State regulatory requirements as well as certain unique requirements of the Fairfax County Fire and Rescue Department. Table 1 provides a list of the eight components of the Program.

Table 1	
Occupational Health and Safety Program	
Component 1:	Occupational Health Center
Component 2:	Physical Fitness/Rehabilitation
Component 3:	Mental Health
Component 4:	Health Promotion/Education
Component 5:	Safety and Prevention
Component 6:	Regulatory Compliance
Component 7:	Program Standards and Guidelines
Component 8:	Performance Evaluation

The Occupational Health Center (OHC) is the primary vehicle through which the medical services of the Occupational Health and Safety Program are delivered. The provision of medical services for Fire and Rescue

Component 1 - *Occupational Health Center*

Department uniformed personnel and volunteers is accomplished through the operation of a County-owned facility staffed by contract personnel. A Fire and Rescue Department Physician serves as the key contract staff member for the OHC. Medical services provided by the OHC include assessing the mental and physical health of applicants, periodic assessment of the health and well-being of incumbent employees, surveillance of incumbents for exposure to toxic agents and/or infectious diseases, and monitoring of personnel for early detection and prevention of job-related illness and injury.

Uniformed Fire and Rescue Department personnel require a broad spectrum of medical/mental health services. These services must be provided by professionals acquainted with the duties, working conditions, and mental and physical demands of the job, as well as the 24-hour a day operation of fire suppression and emergency medical services.

All OHC health care personnel possess the necessary certifications, credentials and experience to provide hands-on clinical care and to coordinate services, such as referrals and laboratory work, provided outside the OHC.

Objectives

1. Assess the overall health of uniformed fire and rescue personnel, provide occupational health care to achieve and maintain a proper state of physical and mental readiness, and provide Fire and Rescue Department management with on-going reports concerning the health status of the workforce.
2. Maintain a network of medical/surgical/mental health specialists/ consultants with training and experience in occupational injury/illness and evaluation, and treatment of public safety professionals.
3. Provide a spectrum of services in a competent, timely, and readily accessible environment compatible with the needs of each individual uniformed fire and rescue employee and the Department.
4. Provide a spectrum of services in an efficient cost-effective manner with the least possible disruption to operations. Schedule service provision to minimize overtime requirements to the extent possible.

The following are the major program elements and their associated “lines of service” (tasks) to be provided by the Occupational Health Center.

COMPONENT 1. OCCUPATIONAL HEALTH CENTER - Major Program Elements -	
	<ul style="list-style-type: none">● Health and Physical Abilities Assessment● Health Risk Assessment● Administrative Services

Health and Physical Abilities Assessment

Definition and Purpose

To determine that uniformed fire and rescue personnel are physically and mentally capable of performing the essential functions of his/her position and to contribute to the early intervention and reduction in the morbidity of work-related injury and illness.

Narrative

Health assessments include pre-employment, as well as periodic and surveillance evaluations which are designed to determine whether or not there are medical and/or mental health problems that may preclude a uniformed fire and rescue employee from safely and effectively performing his/her duties. These evaluations are also designed to detect and/or monitor potential or evolving illnesses associated with employment duties.

Objectives

1. Assure that a recruit has no medical or mental health impairment(s) which, at the time of the evaluation, precludes, or limits (direct threat) him/her from performing the essential functions of the job.
2. Assure that an incumbent is able to perform the essential employment duties in a safe and reliable manner.
3. Monitor uniformed fire and rescue personnel for early intervention of work related illnesses and provide medical surveillance with the objective of reduction in morbidity and impairment.

4. Comply with applicable Federal and State regulations regarding employment-related health and safety and with requirements set forth in workplace-related legislation such as the Americans with Disabilities Act (ADA), and the Equal Employment Opportunity Act (EEO).
5. Optimize the employment and health evaluation process, minimizing time and costs, and avoiding misclassification of health-related disqualifications.
6. Provide appropriate immunizations.

Service Line 1. Pre-Placement Evaluations

Definition and Purpose

To provide comprehensive medical and mental health evaluations to confirm that an individual is medically, physically and emotionally fit to perform essential uniformed fire and rescue functions. The evaluation also will establish personal "baseline" clinical data sets for future comparisons. This evaluation and subsequent medical certification shall be done prior to entering into a training program to become a uniformed Fire and Rescue Department employee or performing in an emergency operational environment as a uniformed fire and rescue employee.

Reference(s): 29 CFR 1910.156.b.2
29 CFR 1910.120.f.3

Content

1. Comprehensive personal, and occupational health history including C.A.G.E. (substance use) questionnaire, immunization review, OSHA Asbestos Standard Initial Medical Questionnaire;
2. Comprehensive physical examination including:
 - a. Height, weight and body mass index (BMI)
 - b. Blood pressure and pulse
 - c. Vision screening (near & far acuity; color vision; visual fields)
 - d. Purified protein derivative (PPD) test for tuberculosis
 - e. Laboratory testing:
 - 1) Complete blood count, including platelets
 - 2) Chemistry profile, including lipid profile
 - 3) Hepatitis B antibody (if immunized)
 - 4) Complete urinalysis
 - f. Chest X-ray (baseline), 14" x 17" post./ant. minimum
 - g. Audiometry (baseline)
 - h. Pulmonary function tests/spirometry, baseline (FVC, FEV1.0)
 - i. Screening exercise stress test
 - j. Forensic urine drug screen

Outcomes

- (1) No significant impairment, or
- (2) Does not meet medical standards

Service Line 2. Periodic Health Assessments

("Annual" with Age and Job Assignment Adjustments)

Definition and Purpose

These evaluations are performed on a periodic basis to monitor the health and well-being of uniformed Fire and Rescue Department personnel. The goal is early detection and intervention to prevent, where possible, the development of work-associated disease and illness. Purpose of the evaluation is to confirm the status of an employee as being "fit for duty."

Reference(s): 29 CFR 1910.156.b.2
29 CFR 1910.120.f.3

Frequency

Adjusted by age and job duties (e.g., fire suppression, modified duty, administrative). May be conducted on an incumbent who has been absent from duty for a medical condition of a nature or duration that may affect performance as a uniformed fire and rescue employee.

Content

- 1. Interval health questionnaire with C.A.G.E. questions and immunization status update.
- 2. Comprehensive physical examination, including:
 - a. Height, weight and body mass index (BMI)
 - b. Blood pressure and pulse
 - c. Vision screening
 - d. Dipstick urinalysis
 - e. PPD skin test
 - f. Laboratory testing:
 - 1) Complete blood count, including platelets
 - 2) Chemistry profile
 - 3) Lipid profile (*every 4 years*)
 - g. Chest X-ray - age and risk adjusted, 14" x 17" post./ant. minimum
 - h. Audiometry
 - i. Pulmonary function test / Spirometry (FVC, FEV1.0)
 - j. Cardiac stress test (*age and risk adjusted*)

Outcomes

- (1) Qualified with respirator clearance
- (2) Not Qualified, temporary
- (3) Not Qualified, permanent

Service Line 3. Separation Examinations

Definition and Purpose

These evaluations are performed upon a uniformed Fire and Rescue Department employee's separation from the Department. Separation may be voluntary or may be necessary due to injury or illness. Portions of this examination are required under 29 CFR Part 1910.1001.

References(s): 29 CFR 1910.1001

Frequency

Examination(s) performed at time of uniformed fire and rescue employee's separation from the Department or employee may be asked to return to the Center for 29 CFR 1910.1001 mandated portion of examination if exposure occurred no more than 30 days after date of termination of employment.

Content

If employee was exposed to airborne concentration of fibers at or above the threshold weighted average (TWA) and/or excursion limit within 30 calendar days before or after the date of termination of employment, examination must include:

- 1. Chest x-ray
- 2. Medical and work history
- 3. Pulmonary function tests

Outcomes

- (1) Baseline medical condition established for date of termination.

Service Line 4. Episodic (Surveillance Post-Exposure or Risk-Related) Evaluations

Definition and Purpose

Workplace medical surveillance evaluations are performed to assist in the early identification of illness or injury which might be related to the adverse effect of a work site exposure and/or simply the working environment. Any employer having employees with occupational exposures to infectious diseases is required to establish a written Exposure Control Plan designed to eliminate or minimize exposure (please see Component 6, Regulatory Compliance). The following listing identifies some infectious diseases to which an emergency response employee may be exposed: infectious pulmonary tuberculosis, hepatitis B, human immunodeficiency virus infection, diphtheria, meningococcal disease, plague, hemorrhagic fevers and rabies.

Exposures to toxic elements and physical substances include, but are not limited to: PCBs, asbestos, and caustic chemicals.

Surveillance programs offer the opportunity for prevention and early disease detection, intervention and treatment, and to establish trends which might indicate a previously unrecognized safety hazard. Many surveillance activities are mandated by State and/or Federal regulation (Component 6, Regulatory Compliance). Most often when employees participate in a surveillance program this is the result of a suspected or confirmed exposure to a work site hazard or potential hazard.

Reference(s): 29 CFR 1910.120.b.E- Hazardous waste operations and emergency response, Safety and health program, Medical surveillance program required.

29 CFR 120.f.3.- Frequency of medical examinations.

PHS Act 42, U.S.C. 300ff-81to 300ff-90, (Ryan White CARE Act) - Emergency response employees.

Content

As mandated by regulation and/or specific exposure-related event with or without respirator clearance. If being evaluated for a specific exposure, i.e., environmental, chemical, physical or infectious agents, the event should be handled in accordance with regulations as well as established Departmental protocol. Furthermore, there is good clinical reason to monitor more closely individuals with known exposure as compared to general surveillance activities associated with "potential" exposures based on working conditions and industrial hygiene environmental quality reports.

1. Asbestos Exposures (Reference 29 CFR 1910.1001)

Upon confirmation of an exposure to asbestos, the following baseline evaluations should be completed if documentation does not exist that these evaluations were done within the previous 12 months or other identified schedule:

Basic physical evaluation and examination
Pulmonary function tests (FVC, FEV1.0)
Chest x-ray, 14" x 17" post./ant.

Individuals known to have been exposed are subject to the following schedule for continued testing:

Years since first exposure	Age of employee		
	15 to 35	35+ to 45	45+
0 to 10	Every 5 years	Every 5 years	Every 5 years
10 +	Every 5 years	Every 2 years	Every 1 year

In addition to the above evaluations, the following documentation shall be completed:

OSHA Asbestos Standard Periodic Medical Questionnaire
Fairfax County Fire and Rescue Department Exposure Report
Virginia State Fire Programs Toxic Exposure Form

This information should be reviewed and evaluated by the Department physician to ensure that appropriate medical follow-up is identified and communicated to affected personnel. Information concerning the occupational risks of exposure to asbestos for uniformed Fire and Rescue Department personnel should be provided to applicants during recruit training and on a yearly basis to incumbents. Training and education should describe the nature of asbestos, proper respiratory protection and use of respirators, and procedures for minimizing the risk of exposure to asbestos.

2. Blood borne Pathogens (Reference 29 CFR 1910.1030; PHS Act 42 U.S.C. 300ff-81; Code of Virginia 32.1-45.1)

Following report of a suspected or actual exposure incident, a confidential medical evaluation and follow-up shall be made available to the exposed employee. The medical evaluation shall include the offering of the hepatitis B vaccine and vaccination series, blood collection and testing for a potential infection, source patient serology results, vaccination status, post-exposure chemoprophylaxis (when medically indicated), risk assessment, counseling, and an evaluation of reported illnesses.

Blood shall be collected as soon as feasible and tested for HBV, HCV and HIV serological status after consent from the employee is obtained. If the employee consents to baseline blood collection but does not give consent for HIV serologic testing, the sample shall be preserved for at least 90 days. If, within that 90 days of the exposure incident the employee elects to have the baseline sample tested, such testing shall be done as soon as feasible. A vaccination status review will be conducted by the Department's physician. Post-exposure chemoprophylaxis or referral is to be determined by the Department physician.

Documentation of the exposure incident is required by the completion of the following:

FRD Report of Communicable Disease Exposure (FSA 314) (See Appendix A).
Personal Injury Report Packet (Appendix A)¹, Employee exposure records
OSHA 200 Log

The employee shall be provided a written opinion from the Department's physician within 15 days of the completion of the evaluation. This written opinion shall be in accordance with 1910.1030.c.5.i to iii - Health Care Professional's Written Opinion.

3. Tuberculosis/Airborne Pathogens

If an unprotected exposure to tuberculosis occurs, the following medical evaluation should be conducted:

Review of the employee's past PPD testing record. If the employee has no documented negative test in the last three months and was not previously tested positive, a Mantoux skin test should be administered as soon as possible to establish an accurate PPD baseline. If the skin test is negative, the employee should be retested in approximately 12 weeks. If the employee tests positive or shows symptoms of TB, a chest x-ray shall be provided. If an employee is determined to be infected with tuberculosis by a true positive PPD skin test, the presence of active disease needs to be ruled out. If there is no evidence of active disease, the Department physician will determine the advisability of recommending chemoprophylaxis with antituberculous medications.

Review of responses on Employee Annual Questionnaire for PPD+ Reactions. In addition, the following forms should be completed by the employee and made available to the evaluating physician.

FRD Report of Communicable Disease Exposure (FSA 314)
Employee Annual Questionnaire for PPD+ Reactions

¹The employee or individual responsible for completing documentation may seek assistance from the Occupational Health Center for appropriate form entry/filing.

4. Hazardous Materials/PCB Exposure (Reference 29 CFR 1910.120.f.3.D)

The primary goal of the Occupational Health Center in dealing with hazardous material exposure incidents is rigorous surveillance and regular testing of exposed employees. Monitoring is accomplished by establishing reliable baseline health data on uniformed Fire and Rescue Department personnel through pre-employment examinations, and carefully following the employee's health status through annual physical examinations and periodic physical evaluations. Training is conducted at regularly scheduled intervals, as mandated by Federal law and in accordance with Department procedures. Post-exposure examinations and surveillance are conducted by Occupational Health Center personnel and records are reviewed regularly.

Personal protective equipment for hazardous materials/PCB exposure includes a number of items (gloves, foot covering, spill-proof body covering, etc.) but the most notable item is the respirator. The County's Respiratory Protection Program/Medical Clearance Evaluation (see Service Line 6) includes measures required for Hazardous Materials/PCB Exposures.

Outcomes

1. Qualified without findings of exposure related sequelae
2. Qualified with abnormalities. May or may not be related to prior exposure(s).
3. Not qualified, requiring further evaluation; may or may not be related to exposure
4. Not qualified, permanent

Service Line 5. Return-to-Work and Fitness-for-Duty Evaluations

Definition and Purpose

Return-to-Work and/or Fitness-for-Duty evaluations are performed for uniformed Fire and Rescue Department personnel who have sustained on- or off-the-job injuries requiring time off from duty, and for uniformed fire and rescue personnel who have been on leave due to a mental or medical condition. In situations involving workers' compensation, the initial return-to-work or fitness-for-duty evaluation will be completed by the employee's treating (Workers' Compensation) physician. The FRD physician may also examine employees following a workers' compensation-related injury but this examination will be conducted only after the treating physician has released him/her to duty status (full or light). Should the FRD physician disagree with the diagnosis and/or duty assessment of the treating physician, these concerns will be relayed to the treating physician by Risk Management. However, the treating physician's opinion/diagnosis regarding duty status will be honored by Risk Management. Workers requiring return-to-work and/or fitness-for-duty evaluations not workers' compensation related may be examined and assigned appropriate duty status by the FRD physician.

The purpose of these evaluations is to ensure that a uniformed fire and rescue worker is able to continue or resume work, or some modification and, if not, to provide appropriate treatment to allow every opportunity to do so in a timely fashion.

These examinations focus on the employee's recent/current illness/injury and address the question of whether or not a uniformed fire and rescue employee can return to work at the time of the examination. The conditions under which the individual can return to work or a projected date for return to work will be established. Individuals found not fit for duty at the time of assessment may require additional, more in-depth evaluation, possibly including consultation with a Department-approved specialist.

Content

History and physical examination with emphasis on recent event/illness raising the fitness for duty concern.

Outcomes

- (1) Fit for duty without restriction
- (2) Fit for duty with restriction(s)
- (3) Not approved for return to duty, further evaluation/time necessary

Service Line 6. Respiratory Protection Program/Medical Clearance for Respirator Use

Definition and Purpose

Uniformed fire and rescue personnel are, as part of their routine job duties, exposed to a variety of noxious airborne substances – smoke, fumes, chemicals, dusts and other particles, as well as infectious agents. The use of respirators for protection against blood/airborne pathogens is recommended by most fire and rescue professional organizations and required by Federal and state regulations. Fire departments must have documented respiratory and blood/airborne pathogen protection programs. As outlined in Component 6, Regulatory Compliance, a Respiratory Protection Program includes eight required steps. One of these steps is “Medical Clearance for Usage.” This portion of the standard, discussed below, will be handled under the auspices of Component 1, Occupational Health Center.

Process

Respirator protection programs must identify circumstances where there are/or may be risks of exposure to potentially harmful materials (smoke, fumes, gases, particulate materials, infectious agents) and must provide employees methods of protection. When avoidance of harmful materials or use of engineering controls is not available, an appropriately designed, fitted and maintained respirator is necessary.

In general, if an employee needs a respirator for protection then that employee must not have a medical or health disorder which would or might interfere with the safe use of that respirator. The employee must be certified as medically able to wear/use a respirator in a safe and reliable

manner. Medical clearance for wearing a respirator will be given by a physician who will determine what tests are necessary to establish that a uniformed fire and rescue worker is medically qualified.

Content

Respiratory Clearance Evaluation (Reference 29 CFR 1910.134.b.10). The respirator clearance examination for Fairfax County Fire and Rescue Service personnel will be performed as part of the pre-placement examination and then on an annual basis. It will include, but is not limited to: medical and mental health history focusing on the individual being free from cardiopulmonary symptomatology or disease as well as being comfortable with the wearing of a respirator. Claustrophobia or other mental/emotional issues/problems must be absent. The history will also include a review of risk factors such as smoking, asthma, exertional dyspnea, obesity, sleep disorders, and allergies to common environmental as well as smoke-containing contaminants.

A cardiopulmonary examination (at a minimum), height-weight measurements, blood pressure and pulse measurements will be performed. Notation of facial hair, facial deformities, dentures or other physical attributes which might impact a satisfactory fit or respirator use (i.e. contact lenses, glasses) will be noted.

Testing will include spirometry and, where indicated, a chest x-ray. Other studies (i.e. blood work, stress testing, full pulmonary function testing) will be performed if indicated.

For uniformed fire and rescue personnel, a statement granting medical clearance to wear a respirator will be provided. Should an individual not be considered, at this time, to be medically eligible to wear a respirator, the evaluating professional will make recommendations as to other evaluation and/or treatment/actions to determine the nature of the impairment and necessary action to re-establish medical clearance.

For those individuals involved in staff support activities, but who must wear a respirator (i.e. HEPA filter), a modification of this process and associated restrictions will be in accordance with Federal and State regulations.

Subsequent to medical clearance, all individuals will participate in the respirator fit testing program.

Outcomes

- (1) Cleared for respirator usage without restriction
- (2) Cleared for respirator usage with restriction(s)
- (3) Not cleared for respirator usage, further evaluation/time necessary

Service Line 7. Neuromuscular Evaluation

Definition and Purpose

A neuromuscular evaluation checks for the range of motion for limbs and joints and particularly for the effect any injuries might have in restricting these ranges of motion. This examination also checks postural issues, proper alignment of joints, and any problems that might affect movement. The tests are particularly important for applicants. For example, if an applicant should have a torn rotator cuff, the full limits of range of motion for the arm must be determined. If any restrictions of motion are found, a decision is required concerning likely impact on job performance. Fire and rescue personnel are placed in many situations where full-body mobility is essential.

Content

A neuromuscular evaluation tests for range of motion for all major movement systems of the body (hand and wrist, shoulder and elbow, neck and thoracic spine, lower back/lumbar region, hip/knee, and foot and ankle).

A test for range of motion is required by most states, including the Commonwealth of Virginia (*Virginia Workers' Compensation Act*), during evaluation of disability claims. *The Guidelines for Evaluation of Permanent Impairment*, prepared by the American Medical Association, discuss range of motion testing and its use in assessing disability. During the neuromuscular evaluation, the examining physician notes any loss in range of motion for any body systems tested. If loss is noted, it is important to determine whether the loss was caused by recent injury, is congenital, or might be due to more serious underlying pathology. If the restriction in range of motion appears permanent, the examining physician should make an assessment of the extent to which the problem might impact performance for fire and rescue personnel. If the restriction appears temporary, a course in physical therapy may be recommended as a means of expediting recovery.

Outcomes

A neuromuscular loss in range of motion may be considered:

- (1) Temporary, with possible reassignment during recovery,
- (2) Temporary, requiring therapy to aid recovery,
- (3) Permanent and disqualifying for front-line service,
- (4) Permanent. Additional medical evaluation recommended.

Service Line 8. Physical Fitness Evaluation

Definition and Purpose

The physical fitness evaluation is conducted to develop a profile describing the overall fitness of an individual. An appropriate level of physical fitness is necessary for fire and rescue personnel to do their job effectively and safely. Physical fitness also is an important factor in maintaining good health, including both physical and mental health.

The physical fitness evaluation includes a number of separate tests, each having a normative standard with a set point representing acceptable performance. These standards are based on programs in place in the military services as well as work done in the field of sports medicine. The physical fitness evaluation is the basis for an annual fitness assessment for personnel in the Fire and Rescue Department.

Content

The annual physical fitness evaluation for fire and rescue personnel will include measures representing five basic dimensions of physical fitness, as described below:

- (1) **Aerobic capacity/cardiorespiratory endurance.** This dimension is one of the most important determinants of physical fitness. Cardiorespiratory endurance is defined as one's ability to perform large muscle, dynamic, moderate-to-high intensity exercise for an extended period. The American College of Sports Medicine (1991) describes the traditionally accepted measure of cardiorespiratory endurance as directly measured maximal oxygen consumption ($\text{Vo}_2 \text{ max}$). Direct measurement of $\text{Vo}_2 \text{ max}$ is based on analysis of expired air samples collected while a subject performs graded, maximal exercise. However, because such direct measurement is often not feasible, and for some may not be safe, procedures for estimating $\text{Vo}_2 \text{ max}$ have been developed. These include submaximal cycle ergometer tests, step tests, distance runs, and walking tests. Formulas and graphs are available for estimation of $\text{Vo}_2 \text{ max}$ based on tests within all of these categories.

One should note that after the age of 25, $\text{Vo}_2 \text{ max}$ declines approximately nine percent per decade. The American Academy of Sports Medicine notes that it is unclear how much this decline is due to the aging process or to reduced physical activity. One can presume, however, that maintenance of an appropriate physical conditioning program will significantly reduce the nine percent decline.

- (2) **Muscular strength.** Fire and rescue personnel perform activities that require significant muscular strength. In assessing muscular strength, a determination is made of the maximal force that can be generated by a specific muscle or muscle group. However, the tasks confronting fire and rescue personnel involve multiple muscle groups. Therefore, tests used for multiple muscle group measurement are

referred to as “dynamic tests” and usually involve ability to bench-press a given weight or to achieve a certain performance level using a system such as a hand grip dynamometer. Tests of lower body muscular strength may use lower leg press tests.

- (3) **Muscular endurance.** Muscular endurance is defined as the ability of a muscle group to perform work over a period of time sufficient to cause muscular fatigue. This is usually tested with a subject executing repeated contractions of a muscle group. The timed ability of a subject to maintain maximum voluntary contractions for a period of time provides an index of muscular endurance. The maximum number of push-ups a subject can perform without rest serves as a measure of muscular endurance for upper body and abdominal muscle groups. A 60-second sit-up test can be used specifically for abdominal muscles.
- (4) **Flexibility.** Flexibility refers to the ability to move a joint through a range of motion. When a joint lacks flexibility, the belief is that the joint has increased susceptibility to sprains and strains. Since sprains and strains are likely injuries in performing firefighting and rescue work, joint flexibility is important. However, no single test of joint flexibility can necessarily be generalized to evaluate total body flexibility. Tests used to provide an indication of body flexibility include measurements of lumbar extension range of motion, lumbar flexion range of motion, and hamstring flexibility.
- (5) **Body composition.** Body composition generally refers to the percentage of body weight that is fat. Excessive body fat is a health hazard and also is detrimental to general physical fitness. Obviously, an individual with excessive body fat cannot be expected to excel in the tasks required of fire and rescue personnel. Many methods are used to assess body composition, or body fat. All methods suffer from problems of reliability and validity. The hydrostatic (underwater) weighing procedure is considered to be the best, but it requires special equipment, is complicated, and is time-consuming. Simpler tests, although not as accurate, generally are used. One measure is simply to determine the waist/hip ratio, with ratios above .95 for men and .85 for women considered to be unhealthy.

The greatest difficulty in using measures of body composition to evaluate health or performance potential is that body composition is very much an individual matter. The percentage of fat and fat distribution from one individual to the next can vary considerably, yet there may be no real health difference. Probably the best way to use body composition as an index of fitness is to obtain annual measures for each individual and review any trend in body composition over time.

Outcome

A physical fitness profile is generated for use by the Fitness Coordinator and the examining physician in reaching a general conclusion as to the overall fitness of the uniformed fire and rescue employee. Specific measures will be recorded for trend evaluation over time.

Service Line 9. Immunizations

Definition and Purpose

Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention (1979) identifies set goals to "reduce indigenous cases of vaccine-preventable diseases" for the general population.

The provision of certain immunizations (Hepatitis B) for fire and rescue personnel is mandated by Federal standards. Other immunizations such as those for polio, varicella zoster, influenza, MMR, tetanus, etc., while not "mandated," are recommended by agencies such as the Centers for Disease Control and Prevention (CDC) and the National Institutes of Health (NIH). For fire and rescue personnel, an immunization program, coupled with education and counseling, will serve as a major "preventive medicine" element in the Occupational Health and Safety Program (OHSP).

Content

The OHSP will require all applicants and incumbents to provide information regarding their immunization status for entry into the OHC medical information system (MIS) and will implement an immunization program for those personnel requiring/requesting immunization. The Fire and Rescue Department Occupational Health and Safety Program will offer, at a minimum:

- Adult Tb, basic and booster
- hepatitis B
- influenza

Objective

Achieve an immunization rate of 100 percent of those fire and rescue personnel eligible for and who agree to being immunized.

Reference(s):

U.S. Department of Health and Human Services, Public Health Service. 1979. *Healthy People 2000: National Health Promotion and Disease Prevention Objectives* (DHHS/PHS 91-50213).

Service Line 10. Routine Screenings

Definition and Purpose

Screening programs serve not only to identify and treat medical issues in a timely manner, but also to *prevent* disease and *educate* employees. Fire and rescue personnel are subject to a multitude of work stressors and are exposed to many potentially harmful viruses and environmental hazards. Regularly scheduled screening can greatly increase the health and productivity of the Fairfax County fire and rescue personnel and, subsequently, reduce costs for the County.

Narrative

Occupational health professionals have long recognized the value of screening programs in reducing health risks for employees. The County OHSP concurs with this assessment and currently provides some screening activities for fire and rescue personnel. The Fairfax County Fire and Rescue Department OHSP will enlarge and improve the screening program using models such as the program offered by the NASA Kennedy Space Center *Occupational Health and Safety Employee Screening Program*. The initial program will include a minimum of three screening activities during the first year of implementation. Two screening activity themes have been identified for the first year. They are (1) Protein purified derivative (PPD) testing for tuberculosis, and (2) Hepatitis B (titer test). The theme for the third program will be determined later in the year.

Future programs may include monthly activities which “highlight” health concerns for fire and rescue personnel. These may include (1) blood pressure screening, (2) cardiovascular health screening, and (3) others.

Objectives

To enhance the health of Fairfax County fire and rescue personnel through prevention and/or early detection of preventable illness and injury by offering screening programs on a regularly scheduled basis.

Health Risk Assessment

Definition and Purpose

The goal of the Occupational Health and Safety Program is to provide Fairfax County uniformed fire and rescue personnel a comprehensive, state-of-the-art occupational health and safety program designed to enhance health, prevent disease and illness, and maximize their ability to enjoy a full career as uniformed fire and rescue personnel. One proven method of reducing risk and maximizing health is through the use of individualized health risk assessments.

Service Line 1. Health Risk Appraisal

Definition and Purpose

A number of well-designed off-the-shelf health risk appraisal software programs are available. The Fire and Rescue Department is currently evaluating several of these programs and will select one for purchase and use by Occupational Health Center personnel. This off-the-shelf software will augment capabilities of the Occupational Health Center Management Information System (MIS).

A health risk program will begin with the opening of the Occupational Health Center. All applicants and incumbents will be asked to complete a health risk assessment questionnaire at the time of their pre-placement or annual evaluation. Information provided by employees will be entered into the computerized system and stored with appropriate medical records. A schedule for repeating these assessments (annually/bi-annually) will be determined once the initial analysis of pilot program data is completed.

Objective

To develop cost-effective health promotion/education and screening programs targeted at definable (measurable) areas of need for individual uniformed fire and rescue personnel and the entire workforce using data provided via the use of health risk assessments.

Administrative Services

Definition and Purpose

Administrative duties within the Occupational Health Center encompass responsibilities ranging from overall supervision and management of contract staff to day-to-day clerical duties such as scheduling, greeting patients, filing, record entry, telephone interactions, etc. A major goal of the Occupational Health and Safety Program is to establish an in-house system of record keeping which will provide Department and uniformed fire and rescue personnel with a clear, concise picture of the health of the workforce and of the individual fire and rescue worker. This will be accomplished by the OHC contract staff, working in concert with County personnel and will greatly facilitate programs to cut costs, decrease time off duty, and provide necessary statistical reporting. In order to accomplish this, it is necessary that the contract staff be fully familiar with the operation and use of the OHC management information system (MIS).

Areas to be addressed by the OHC in the area of "administrative services" are outlined in the service lines identified below.

Service Line 1. Case Management for Occupational Injuries and Illnesses

Definition and Purpose

Due to the nature of the work, fire and rescue personnel sustain a number of occupational injuries and are placed in situations that may lead to development of occupational illnesses. Initial treatment for occupational injuries is beyond the authority of the Occupational Health Center and injured personnel will be seen by either a physician on the County's "Authorized Physician Panel," or, in the event of a medical emergency, at a local hospital emergency room. The OHC will, however, assume an active role in the record keeping and tracking requirements of these events. The Center's role will be closely coordinated with the Fairfax County Risk Management Division.

Objective

The primary objective of OHC involvement in case management is to assist in optimizing the healing process. The OHC will monitor the prescribed therapeutic program(s) and attempt to assure the most effective use of resources. Another goal is to provide Department personnel a better "picture" of overall injury status and to facilitate a uniformed fire and rescue employee's return to duty in a timely fashion. Improved monitoring, record keeping and tracking of personnel should result in cost savings to the Department and in better care for uniformed fire and rescue personnel.

Process

OHC Case Management Program. The primary responsibility for case management of occupational injuries/illnesses rests with the County's Risk Management Division. The Risk Management Division and the Fire and Rescue Department have developed a Memorandum of Understanding (MOU) outlining Department responsibilities in case management for uniformed fire and rescue personnel. A copy of this MOU is included as Appendix B.

Specific administrative services to be carried out by Occupational Health and Safety Program personnel are under review but the basic tenets of the program include:

- (1) Record and enter all occupational injury/illness cases in OHC MIS. Review records at regularly scheduled intervals and "flag" files for review with appropriate personnel for specific issues including:
 - a. Time between periodic contact with the patient is lengthening; no sign of resolution of the problem
 - b. Inordinate number of visits to the physician
 - c. Conflicting status or consultative reports
 - d. More than one physician being seen
 - e. Intermittent lost time, despite return to work
 - f. Claimant's attorney/physician has history of questionable interventions.

- g. Employee has history of multiple (at least two) lost-time injuries in the past five (5) years.
- (2) Provide appropriate State and County-required forms to Risk Management in a timely fashion and establish “tickler files” for follow-up of form(s) status. Maintain an open line of communication with Risk Management to ensure they are informed of any change in status for uniformed fire and rescue personnel.
- (3) Maintain regular contact with off-duty fire and rescue personnel, those assigned alternative duty responsibilities, and treating physicians to ensure that required medical appointments are accomplished in a reasonable time period and to offer uniformed fire and rescue personnel necessary consultation.
- (4) Monitor progress and outcome against established guidelines and notify Risk Management if there are any deviations from these guidelines:
 - a. Return to Work Following Selected Conditions and Procedures - A Reference Guide, 1989, Boston University Health Policy Institute);
 - b. The Medical Disability Advisor, Second Addition, Read P., American College of Occupational and Environmental Medicine (pub. LRP), 1994.
 - c. Fitness for Work: the Medical Aspects, Edwards FC. Oxford University Press, 1988.
 - d. Treatment Standards for Work Related Injuries, Wegnar, J.A., J.O.R., 3, #3, 135, 1993.
- (5) Establish an “alternative duty” status sheet for weekly review to ensure that Department personnel are apprised of the number of uniformed fire and rescue workers on alternative duty status, job assignments, and current health status of each person on alternative duty.
- (6) Provide monthly, quarterly, and annual Occupational Injury Status Reports.

Service Line 2. Consultants and/or Out-of-House Service Requirements

Definition and Purpose

The primary role of the Occupational Health Center is to provide comprehensive occupational health and safety services for Fairfax County uniformed fire and rescue personnel. The conduct of such a program requires the use of contract and/or consultant services, including medical specialists, laboratories, employee assistance program services and biohazardous waste disposal services. The Department has established relationships for provision of all such services either through Occupational Health and Safety Program-specific arrangements or through participation in County-wide contracts.

Objective

Ensure that all required services are available and are performed in a professional, timely, and cost-effective manner.

Process

Administrative duties to be performed by the OHC for consultant/specialist and/or out-of-house contract requirements include:

- (1) Maintain a Department-approved list of specialists/consultants who may be called upon when a uniformed fire and rescue employee requires diagnostic and/or medical attention from a specialist concerning an illness or condition that may preclude the Fire and Rescue Department physician from determining a medical classification status. This list will include, at a minimum, specialists in Table 1-1.

In the case of a workers' compensation claim, the procedures of the Risk Management Division will be followed and the County-approved physicians list will be used.

Occupational Health Center personnel will ensure that all specialists agree to and abide by County-established operating criteria and will maintain up-to-date records for all required referrals. Additionally, the OHC will maintain regular contact with specialists to remain apprised of medical status of uniformed fire and rescue personnel.

Table 1-1 CATEGORIES OF MEDICAL CONSULTANTS REQUIRED OCCUPATIONAL HEALTH CENTER	
Specialty	Credentials
Audiology	Certified; emphasis = public safety personnel
Cardiology	Board certified; wellness orientation
Dermatology	Board certified
Infectious Disease	Board certified
Orthopedic Surgery	Board certified; sports medicine orientation
Psychology	Licensed/certified; industrial psychology orientation. Emphasis on public safety personnel
Pulmonary Medicine	Board certified; experience in occupational pulmonary

Consultant Criteria

1. Consultants must share the Fairfax County Fire and Rescue Department's philosophy of care/treatment while responding to the needs of our patients (employees).
2. Consultants will provide credential information documenting their training, licensing, certification, experience, professional liability coverage and a signed letter of understanding regarding mutual expectations.
3. The Fairfax County Fire and Rescue Department's physician will complete a referral form, for each referral, including the problem/diagnosis and the reason for the referral.
4. The Consultant agrees to see patients within three working days.
5. Consultants agree to answer the question(s) asked in the written referral form. If other comments or suggestions seem necessary, the consultant will discuss these thoughts directly with the referring physician.
6. The results of a specialty consultation will be provided in brief the same day as the consultation, followed by a full written report in five working days. If the consultant feels the need for additional studies or treatment, the conversation between the consultant and the Fairfax County Fire and Rescue Department physician should take place while the patient (employee) is in the consultant's office.
7. Consultants agree not to re-refer, order additional studies, or suggest surgery, except in an emergency, without discussing such recommendations with the Fairfax County Fire and Rescue Department physician.
8. Consultants agree not to change an individual's work status. Unless otherwise agreed to, such changes will remain in the hands of the Fairfax County Fire and Rescue Department.
9. Consultants agree not to communicate issues, concerns, or recommendations to employers or insurance carriers or others without a prior or tandem discussion with the referring Fairfax County Fire and Rescue Department.
10. Consultants agree to participate in the Fairfax County Fire and Rescue Department case management program.

- (2) Fairfax County has existing contracts with accredited laboratories for the performance of required routine and specialized laboratory testing (routine blood work and urinalysis, forensic urine drug screen). Occupational Health Center personnel will maintain working relationships with identified laboratories to ensure timely pick-up of specimens; proper handling and return of required results, reports/analyses and ensure that all results are appropriately entered in the Center's management information system.
- (3) Fairfax County has an existing contract with a provider for the Employee Assistance Program in accordance with Federal and State regulations and standards. Occupational Health Center personnel will maintain a relationship with this provider to ensure appropriate referral, follow-up, and record keeping.
- (4) Fairfax County has an existing contract with a provider for proper disposal of biohazardous waste. Occupational Health Center personnel will establish and implement appropriate labeling, disposal, and record keeping procedures to ensure County compliance with Federal and State regulations and to ensure the safety of health care workers and employees.

Service Line 3. Quality Assurance

Definition and Purpose

Quality of care is defined as the timely provision of necessary and reasonable, clinically competent, cost-effective services consistent with patient needs. Most often the quality of care is determined by a combination of a professional review of the clinical process and outcome and the patient's perception of the quality of service.

Service quality is determined solely by the consumer (employee/ patient) and is reflective of the consumer's feelings about the "center's" sensitivity, responsiveness, accessibility and availability, service environment and communications. Personnel of the Fairfax County Fire and Rescue Department Occupational Health Center will take whatever steps are necessary to provide quality care and to assess and assure all clients an acceptable level of service.

Objective

To ensure that all contract service expectations are successfully met and to establish a documented record of performance.

Process

To assure that occupational health services are clinically sound, a sample of records will be reviewed annually by the contract's Quality Assurance Team. Recommended team members include personnel from the Fire and Rescue Department, Risk Management, Internal Audit,

Information Technology, Health Department, etc. The OHSP Program Manager will serve as the Committee Chair.

These records will be reviewed for completeness, diagnostic and therapeutic consistency and outcome. Outcomes will be reviewed against a standard developed by the Quality Assurance Team. Before application, any standard to be used will be included in the development and implementation of practice guidelines and presented to management and providers for information and comment. All records, as well as compilation of data/information, will be handled in a confidential and, where appropriate, coded manner. Variations from expected "norms" will be discussed with the Fairfax County Fire and Rescue Department. For extraordinary variations, immediate intervention(s) will be undertaken. Qualified County personnel (Health Department physicians, etc.) will assist the QA Team in this annual record review and in determining appropriate standards. Results and findings of such reviews will be used to establish priorities in education and training and for continuous quality improvement efforts.

Quality of service will be assessed through the use of questionnaires given to each patient/employee seen at the Fairfax County Fire and Rescue Department Occupational Health Center. A monthly summary report of questionnaires will be provided to the Department for review and action. Specific complaints about the Fairfax County Fire and Rescue Department's services will be discussed directly with the site manager/ representative and providers at the Center as well as the Quality Assurance Team. Summary reports and review comments will be utilized for the establishment of performance improvement activities.

Conclusion

Where problems are found to exist, the Department may require that the Center providers or consultants submit an action plan. Continued improvement, based on an agreed to performance threshold, must be demonstrated. Failure to do so may result in the termination of the contract.

Service Line 4. Management Reporting

Definition and Purpose

Procedures performed within the Occupational Health Center are intended to enhance the health, well-being and productivity of the County's uniformed fire and rescue personnel. In order for the Program manager to remain abreast of progress and problems, identify strong and weak areas, and develop epidemiological data for trend analyses regarding the health of the workforce and individual uniformed fire and rescue personnel, a formal procedure for reporting is being implemented at the Center.

Objective

To facilitate communications between contract and County personnel within the program and to ensure information relevant to the Program is disseminated in a timely and appropriate manner.

Content

Reports to be prepared by OHC personnel include, but are not limited to:

- Monthly and annual “Management Indicator Report.” This report will provide data on workload, productivity, efficiency, and operational costs. This report will also include information regarding any consults/referrals accomplished during the reporting period.
- Monthly, quarterly, and annual Occupational Injury/Illness Status Report. This report will provide summary information on all uniformed fire and rescue personnel who are either on leave or assigned alternative duty during the reporting period and will include: (1) name, (2) date of injury, (3) nature of injury, (4) number of lost time days, and (5) current status; i.e., scheduled for return-to-work evaluation, therapy program instituted, etc.
- Other reports (including statistics) as required/requested by the Fairfax County Fire and Rescue Department.

Service Line 5. Medical Records

Definition and Purpose

Maintenance of complete, up-to-date medical records for all applicant and incumbent uniformed fire and rescue personnel seen in the Occupational Health Center is essential. These records serve not only as a permanent record of occupational health care and status for the employee, but also as an invaluable tool to health care providers in assuring that all medical evaluations have been completed successfully and in a timely manner.

Narrative

The Fairfax County Fire and Rescue Department Occupational Health and Safety Program is aware of Federal and State regulations regarding content, confidentiality and access to medical records. Medical records maintained within the Occupational Health Center will be considered the property of the Fairfax County Fire and Rescue Department Occupational Health and Safety Program. These records will be treated with the utmost care and procedures for management information system data entry, accessibility, and confidentiality will be carefully reviewed with responsible contract personnel.

Summary information required by FRD personnel in order to determine accident/injury trends, illness “clusters,” training requirements, and/or cost-benefit analyses will be provided by the OHC upon request. Such data will be “cleansed” of any identifiers prior to its release. Records required by out-of-house personnel for particular issues (litigation, death or incapacitating illness/injury,

etc.) will be provided in accordance with regulations set forth in the Code of Virginia or, where applicable, Federal regulations governing appropriate procedures for such requests.

A brief overview of procedures for maintenance of medical records is provided below. This overview is intended only as a guideline and should not be interpreted as inclusive. Occupational Health Center contract personnel are required to maintain a written procedures manual on medical record content, access, confidentiality, maintenance and retention and to provide training for all contract personnel with authorized access to these records. The OHC contractor is also responsible for ensuring Federal, State and local legal and/or regulatory compliance with regard to medical records and for keeping County personnel apprised of any changes in laws or regulations affecting the Fire and Rescue Department Occupational Health and Safety Program.

Content. Medical records maintained in the Occupational Health Center Management Information System (MIS) will contain all information provided by employees regarding medical and work history, as well as results of all procedures performed in the Center, results of required laboratory tests, and information regarding any out-of-house specialist referrals. Additionally, these records will contain immunization records, exposure reports (both infectious disease and toxic), occupational injury/illness incidents, and training information.

OHC-maintained medical records will not contain information regarding Employee Assistance Program participation nor will OHC personnel have access to this information. EAP records are the sole responsibility of the County's EAP contractor and are not considered part of the OHC medical record system. EAP records are separate and apart from this system.

Access to Medical Records. The OHSP will implement procedures for access to medical records which are in compliance with provisions set forth in 29 CFR 1910.1020 (formerly 1910.20), "Access to Employee Exposure and Medical Records," and the Code of Virginia. Occupational Health Center personnel having access to these records will be appropriately certified and trained. Requests for medical information received in the OHC from other County personnel will be reviewed and only that information required to fulfill requests will be provided; i.e., data required for filing of occupational injury claims, etc. Records of such requests and their status will be maintained. Under no circumstances will medical records be released from the Occupational Health Center without prior written request and/or consent of the employee.

Retention of Medical Records. The length of time a facility must retain medical records on an employee varies depending upon the circumstances. However, employers covered under the Occupational Safety and Health Act (OSH Act) are required to retain records for 30 years after the employee has terminated employment. Therefore, the Fairfax County Fire and Rescue Department Occupational Health and Safety Program will institute appropriate retention and archiving procedures to maintain all medical records in accordance with the OSH Act and subsequent OSHA regulations.

Objectives

To ensure that the medical recording process (a) supports quality care for fire and rescue personnel and (b) allows Fairfax County, through use of appropriate medical and operational data, to maintain proper oversight of Occupational Health Center Programs.

Reference(s): 29 CFR 1910.1020 - Access to employee exposure and medical records.
Code of Virginia, paragraphs 54.1-2405; 54.1-2406; 32.1-127.1:02; and 54-1-2403.3.
Occupational Safety and Health Act (OSH Act).
29 CFR 1910.1001 - Asbestos. (Record keeping/Medical Surveillance)

Regular physical activity is important since it operates both to prevent and manage a number of diseases. Good physical condition also may protect against disability. For fire and rescue personnel, good physical conditioning is

essential. Special activities are included in the Program to protect fire and rescue personnel against specific forces encountered in their specialized work environment. The OHSP also promotes rehabilitation efforts designed to aid an expeditious return of injured or ill personnel to full duty.

Component 2 - *Physical Fitness/Rehabilitation*

Objectives

The OHSP Physical Fitness/Rehabilitation program works to assure that fire and rescue personnel are provided with the resources, time, and expertise to achieve and maintain peak physical fitness levels, facilitate recovery from a work-related physical and/or mental health impairment and to provide every opportunity for individuals to continue their careers as public safety professionals. The program also seeks to enhance and encourage physical and mental “wellness” and minimize the risk of job-related injuries by providing opportunities to maintain and/or enhance fitness levels.

COMPONENT 2. PHYSICAL FITNESS/REHABILITATION - Major Program Elements -	
●	Physical Fitness
●	Rehabilitation

Physical Fitness

Definition and Purpose

Research has repeatedly shown the need for high levels of aerobic fitness, anaerobic fitness, muscular strength and muscular endurance to perform safely and effectively in the fire service².

²Powell, K.E., Thompson, P.D., Caspersen, C.J., Kendrick, J.S. (1987). Physical activity and the incidence of coronary artery disease. *Ann Rev Pub Health*, 8, 253-287.

Gledhill, N., Jamnik, V.K. (1992). Characterization of the physical demands of fire fighting. *Can. J. Spt. Sci*, 17(3), 207-213.

The requirement to provide opportunities to achieve and maintain peak physical fitness is recognized by the Department and the County. Consequently, special activities are included in the Program to protect fire and rescue personnel against specific forces encountered in their specialized work environment.

Narrative

Public safety personnel involved in fire suppression and emergency medical services work in notably dangerous conditions and are exposed to a variety of threatening situations. Safe performance of job duties requires these personnel to achieve and maintain peak fitness levels to minimize risk of work-associated injuries and illnesses. The intent of the Physical Fitness portion of this Program component is to provide accessible fitness opportunities for all fire and rescue personnel.

Objectives

1. Provide easily accessible fitness program opportunities.
2. Provide skilled health care personnel at the Occupational Health Center to counsel employees on personal fitness programs and monitor physical therapy programs.
3. Provide trained peer-fitness counselors who can design fitness programs for employees and monitor their progress.

Service Line 1. Fitness Opportunities

Definition and Purpose

Provision of various fitness opportunities for fire and rescue personnel demonstrates, in a tangible manner, the Department's commitment to ensuring a well balanced Occupational Health and Safety Program and, conversely, maximizes opportunities for FRD to have a more motivated, safer, and capable workforce. Fitness opportunities to be provided Fairfax County uniformed fire and rescue personnel are detailed below.

Content

OHSP Fitness Center. The Fairfax County Fire and Rescue Department Occupational Health and Safety Program operates a Fitness Center which is located in the Headquarters building at 4100 Chain Bridge Road. Management of this facility is provided by the Fire and Rescue Department Fitness Coordinator. Occupational Health Center contract personnel work with the Fitness Coordinator in assessing current fitness levels, designing personalized fitness programs, and conducting required fitness-related evaluations.

Equipment in place in the OHSP Fitness Center provides hardware necessary for the development and implementation of individualized fitness programs to achieve high levels of: (1) aerobic and anaerobic fitness and (2) muscular strength and endurance. Equipment purchase and placement has been carefully reviewed to allow an orderly flow of activity and facilitate appropriate circuit training procedures.

The facility is available for use by all uniformed fire and rescue personnel.

Station Equipment. The County's OHSP will purchase and install fitness equipment in individual fire stations. Equipment to be provided individual fire stations will be chosen based on available space and, where possible, station-specific fitness program requirements.

Individual station equipment is intended primarily for the use of those personnel assigned to the station. However, arrangements/procedures will be implemented to allow fire and rescue personnel assigned to other stations to use equipment if required.

Satellite Fitness Centers. Due to the fact that many individual fire stations do not have space available to accommodate more than a few pieces of fitness equipment, the Fire and Rescue Department OHSP will establish "satellite fitness centers" within existing stations to provide opportunities for station personnel which do have adequate space at their assigned stations. These satellite fitness centers will have a full complement of fitness equipment and will be modeled after the OHSP Fitness Center. Equipment purchase and placement will be reviewed to allow an orderly flow of activity and facilitate appropriate circuit training procedures. These satellite centers are intended for use by all uniformed fire and rescue personnel.

County-Operated Recreational Centers/Facilities. Fitness opportunities for fire and rescue personnel who cannot use facilities available at individual stations, satellite centers, or the OHSP Fitness Center due to work schedule(s) or geographic location will be encouraged to use County-operated recreational centers/facilities. Use of these County-operated facilities will be supported by the OHSP. Fire and rescue personnel using these facilities will be required to sign in on registers maintained to ensure appropriate billing to the Fairfax County Fire and Rescue Department OHSP.

Service Line 2. Peer Fitness Trainers' Program

Definition and Purpose

The FRD OHSP strongly endorses the National Fire Academy's recommendation regarding establishment of a broad-based Fitness Committee for all fire and rescue departments. One program initiative directly aligned with this recommendation is the Peer Fitness Trainers' Program.

Peer fitness trainers are uniformed fire and rescue personnel who volunteer to join the program. The role of these peer trainers is to provide exercise leadership through guidance and supervision, and to encourage safety and participation in regular physical fitness programs. One goal of the Program is to identify an appropriate ratio of peer fitness trainers to number of employees to ensure adequate coverage. Ultimately the Program goal is one peer fitness trainer per shift per battalion.

Content

Personalized Exercise Programs. Trainers are given careful instruction in proper procedures for determining appropriate fitness regimens for individuals. Design of personalized exercise programs must be based on combination of factors, including the individual's perceived need for attention to particular weaknesses (upper body strength, endurance, etc.) and on physical evaluation results. Personalized programs must be tailored for individual requirements and should be regularly monitored to ensure maximum benefit and safety.

Individual's requesting a fitness program for treatment of a specific injury must have medical clearance from either their treating physician or the Fire and Rescue Department physician. Peer fitness trainers will work with medical professionals to accomplish individual rehabilitation program goals.

Equipment Use Training. Peer fitness trainers are instructed in the proper use of equipment to ensure their safety as well as the safety of individuals under their tutelage. Manufacturer's recommendations are carefully reviewed and all peer fitness trainers must demonstrate a thorough understanding of equipment utilization before being allowed to participate in the program.

Equipment Maintenance. Peer fitness trainers are instructed in proper equipment maintenance procedures. Maintenance activities that can be safely accomplished are reviewed, as well as manufacturer's service and/or calibration recommendations. Peer fitness trainers are responsible for ensuring that all equipment utilized in their program(s) is maintained properly and that appropriate Department personnel are notified in a timely manner when equipment requires calibration, servicing or repair which must be accomplished by out-of-house sources.

Training

Fairfax Fire and Rescue Department Peer Fitness Trainers receive training and instruction from the FRD Fitness Coordinator. An effort is currently underway to develop in-house, Department-specific certification methodology/requirements for these individuals.

Service Line 3. Work Performance Evaluation(s)

Definition and Purpose

Work performance evaluations should be conducted annually for all fire and rescue personnel. The purpose of these evaluations is to ensure that uniformed fire and rescue personnel can successfully perform essential functions required in their chosen occupation. These evaluations differ from “physical fitness evaluations” in that they are not designed to measure flexibility, endurance and strength per se but to determine, in a controlled environment, one’s ability to safely and efficiently perform job-specific tasks in a given period of time.

Work performance evaluations are monitored by the Department’s Physical Fitness Coordinator and/or members of his staff and all participants are medically cleared by the Department’s physician prior to completing the evaluation.

Content

The Work Performance Evaluation consists of 10 events designed to measure the physical ability of fire and rescue personnel to operate effectively on an incident scene. The 10 events are:

Work Performance Evaluation – Events–	
1. Protective Gear. Allows participant to safely don complete issue of personal protective equipment (PPE).	6. Hand Line Pull. Simulates participant’s ability to reposition charged hand line.
2. Ladder Carry, Raise, Extension. Simulates participant’s ability to place a portable ladder in-service.	7. Pike Pole. Simulates participant’s ability to pull ceilings and/or remove debris from above-shoulder level.
3. Forcible Entry. Simulates participant’s ability to gain entry into a locked structure.	8. Equipment. Simulates participant’s ability to carry equipment from point to point.
4. High Rise Pack. Simulates participant’s ability to carry high rise pack to upper story location.	9. Ventilation. Simulates participant’s ability to create an opening for ventilation.
5. Hand Line Advancement and Pull. Simulates participant’s ability to advance charged hand line.	10. Victim Rescue. Simulates participant’s ability to perform rescue operation(s).

The first event, “Protective Gear,” is the only untimed event in the series. This is done to ensure ample time for the participant to properly secure all personal protective equipment (PPE), including self-contained breathing apparatus (SCBA). This greatly increases participants’ ability to safely accomplish the timed portion of the Work Performance Evaluation.

Events 2 through 10 are timed. These events are performed on a “continuous” basis and participants are encouraged to move as safely as possible through and into each consecutive task in the series. No running is allowed at any time during the work performance evaluation. Successful completion is defined as meeting (or exceeding) the minimum required performance level. Incomplete performance, or failure to meet the required minimum level demonstrates lack of physical preparedness for the essential functions of the job. Appropriate, validated measures for minimum performance levels are under review.

Participants who do not “pass” the work performance evaluation will be counseled and evaluated by the Department’s physician. Work hardening programs will be discussed and designed for any participant who indicates an interest in such a program. Time limits for retesting participants are under review.

Outcomes

- (1) Certified to perform all physical aspects of present work classification
- (2) May continue to perform in present work classification with (specify) physical limitations.
Note: Limitations to be listed in general terms related to performance; i.e., lifting restrictions, etc.)
- (3) Not certified to perform physical aspects of present work classification

Rehabilitation

Definition and Purpose

Costs incurred for occupational injury and illness cannot be measured in dollars alone. Certainly the costs for medical care, replacing an injured employee during time off duty, and overtime paid to ensure adequate public safety coverage are of concern, but “cost” also includes the price paid by the employee and his/her family who experience mental/emotional anguish and diminished earning capacity.

The Fairfax County OHSP is committed to providing uniformed fire and rescue personnel a comprehensive rehabilitation program, using both in- and out-of-house resources, that will facilitate appropriate therapy and healing and, consequently, increase the opportunity for individuals to enjoy a full career as public safety professionals.

Narrative

Fire departments responding to the 1995 International Association of Fire Fighters *Death and Injury Survey* reported that 89,595 fire fighters sustained 33,670 line-of-duty injuries either at the emergency scene or while performing other job-related tasks. When compared to U.S. Department of Labor statistics for private industry, frequency of fire fighter job-related injury is 4.5 times that of workers in private industry. In 1995, fire fighter injuries caused 9,597 lost work hours per 100 workers.

Objectives

1. Facilitate timely recovery and return to work.
2. Minimize permanent impairment.
3. Minimize avoidable early retirement.
4. Minimize lost time.
5. Optimize cost effective treatment, outcomes and expenses.

Service Line 1. Alternative Duty Program

Definition and Purpose

Alternative duty programs are a recommended and proven resource for incorporation in workers' compensation programs. Fire and rescue personnel who have sustained injuries or who are experiencing medical problems that prevent them from performing full job duties but who are able to work in some capacity are better served by programs of this nature than by being unnecessarily sedentary due to a lack of appropriate temporary job assignments.

Content

The Fairfax County Fire and Rescue Department Occupational Health and Safety Program is developing an alternative duty program which will be available to all uniformed fire and rescue personnel who have been declared unable to fulfill full job duties by a qualified physician and who have been examined by the Fire and Rescue Department physician to determine physical limitations and abilities.

Many factors must be considered in this program and all procedures will be reviewed with the Department's physician, physical fitness coordinator, and appropriate County management prior to implementation. Factors to be considered in the FRD OHSP Alternative Duty Program include:

Proper assignments based on limitations. The unique job requirements for fire and rescue personnel must be considered when determining appropriate alternate duty assignments. While personnel normally assigned to positions considered "administrative" may in fact be able to return, at least part-time, to normal work activities while recovering from an injury or illness, personnel assigned to fire suppression and medical emergency positions may have conditions that preclude required activities such as lifting, stair climbing, bending, kneeling, etc.

A careful review of each individual's assigned job task and physical limitations must be done. Recommendations for alternate duty placement(s) which promote a well-balanced, gradual return to full duty will be based on the results of findings.

Conditioning Opportunities. Conditioning opportunities for all program participants will be provided by the OHSP Physical Fitness/ Rehabilitation Program, under the guidance of the Department's Fitness Coordinator. Conditioning opportunities will include the design and monitoring of a personalized physical fitness/rehabilitation program based on input from the individual's personal physician and/or physical therapist, the Department's physician, and the Fitness Coordinator's own assessment.

Carefully monitored physical fitness/rehabilitation programs can be extremely valuable in boosting an individual's morale and in facilitating the healing process. These programs serve to enforce workers' belief in the Department's commitment to their health and well being and to make the Department more cost effective and efficient by returning workers to full duty status in a timely manner.

Rehabilitation Position (reassignment). Although it is the goal of the FRD OHSP to successfully return all injured fire and rescue personnel to full active duty, we recognize that a 100 percent rate of success is unrealistic. Therefore, the FRD OHSP will institute a program to identify appropriate County positions for personnel who cannot return to fire and rescue service and to further provide training required for such a career change.

This program has not yet been clearly documented and approved, but work is underway to outline the basic premise, define requirements, and secure support from other County departments for its implementation.

The productivity of any employee can be affected by his/her mental or emotional state. This is especially true for fire and rescue personnel where emergency situations may require full attention and maximum effort. The Fairfax

County Occupational Health and Safety Program (OHSP) provides a range of mental health support services. Some services guide individuals through day-to-day stress conditions while others deal with emotions caused by the severe trauma encountered in frequent emergency situations.

Component 3 - *Mental Health*

Objectives

The Fairfax County Fire and Rescue Department OHSP is thoroughly committed to ensuring that all uniformed personnel are provided every opportunity to enjoy a productive, profitable, full-time career. Provision of services to enhance mental health is an essential ingredient in honoring this commitment.

COMPONENT 3. MENTAL HEALTH - Major Program Elements -	
	<ul style="list-style-type: none">● Behavioral Health● Emotional Health● Spiritual Health

Behavioral Health

Definition and Purpose

A mentally and emotionally fit workforce plays a key role in the success of any fire department. Fire and rescue personnel are subject to long work hours, shift work, sporadic high-intensity situations, strong emotional involvement, and exposure to extreme human suffering. These factors can impose undue stress on fire and rescue personnel and on their families.

Objective

The Fairfax County Fire and Rescue Department Occupational Health and Safety Program seeks to assist fire and rescue personnel effectively cope with emotional, physical, and mental stresses

of work and personal issues through active support of and participation in the County-wide Employee Assistance Program. The OHSP supports the tenet that early identification and intervention serves the individual in need and the County.

Service Line 1. Employee Assistance Program.

Definition and Purpose

The Employees' Assistance Program (EAP)³ is provided via contract for Fairfax County. The EAP was developed to help employees cope effectively with personal or job stress. In addition, the EAP aims to retain valued employees, increase job effectiveness, and encourage a positive work climate.

Content

This program is not specific to the Fire and Rescue Department but covers all County employees except exempt limited-term and exempt part-time workers. The EAP offers assessment, short-term counseling, and referral for employees and family members. However, Department-specific counselors who are attuned to the job stressors of fire and safety personnel work within the EAP and are available to fire and rescue personnel.

The Department recognizes that personal problems involving alcohol, drug dependency, marital and/or family stress, psychological conditions, and/or other human concerns can impact job performance. Fairfax County offers a confidential EAP to help employees deal with personal problems before they result in deterioration of health, family life or job performance.

EAP counselors are available for scheduled counseling sessions during regular work-week office hours and for emergency consultations on a 24-hour/7-days per week basis. Emergency consults are available via a published "EAP hotline" telephone number. EAP consults can be employee-initiated or employer-referred.

All records and conversations with EAP counselors are treated in a confidential manner in accordance with Federal and State regulations and professional EAP standards. Employee Assistance Program records are not part of the Occupational Health Center (OHC) record keeping system. EAP records are the sole responsibility of the County's EAP contractor and are separate and apart from the OHC management information system.

³A full explanation of EAP programs is available in the Fairfax County Standard Operating Procedure (SOP) 2.3.08. Interested persons should obtain a copy of this SOP.

Service Line 2. Peer Support Program.

Definition and Purpose

In addition to the County-wide EAP Program, the Fairfax County Occupational Health and Safety Program supports the fire and rescue Peer Support Program (PSP). The purpose of this program is to provide informal mentoring and sponsor services to coworkers facing issues of substance abuse. The goal is to facilitate recovery for fire and rescue personnel via a recovery resource that is familiar, supportive and confidential. The premise of the program is to provide a mechanism whereby an individual can establish and maintain a relationship with co-workers in recovery. These peers provide support which can decrease the chance of relapse and encourage recovery.

Content

Qualifications, Selection, and Expectations of Peer “Counselors.” The EAP administers the Peer Support Program and is responsible for its mission statement, scheduling and chairing meetings, arranging for or providing training and consultation, and monitoring its activities.

Services of the PSP are provided by fire and rescue personnel or, in some cases, by other County public safety personnel. Most peer support counselors (called “Peers”) are Fire and Rescue Department employees. Individuals wishing to become Peers are expected to meet and maintain certain criteria:

- Prospective Peers must have a minimum of two (2) years in his/her own recovery.
- Prospective Peers must be nominated and/or recommended by other Peers.
- Peers must be actively maintaining/working their own program of recovery and focusing on this as their first priority. Peers may request that their name be temporarily removed from the referral list for personal reasons that are adversely affecting their recovery.
- Peers are required to sign a release-of-information authorizing the EAP to provide their name as a resource to clients when appropriate.
- Peers must be genuinely committed to the Program; e.g. attend scheduled PSP meetings and be available to serve in the Peer support role.
- Peers must understand that involvement with the Program is an agreement to serve in an informal, undesignated “sponsor” role.

Training and Education

- The PSP will meet periodically for peer supervision and group discussion of selected topics such as counseling and communication skills, enabling vs. “sponsoring,” etc.
- The PSP may, on occasion, utilize outside training resources and speakers.
- The PSP will utilize the EAP for input, monitoring, skills development, and consultation as a component of ongoing training and education.

Emotional Health

Definition and Purpose

Fire and rescue personnel must deal effectively with situations unfamiliar to the ordinary citizen. These individuals regularly respond to potentially life-threatening emergencies and must deal with incidents where others have suffered severe injury, death and property loss. The ability to discuss reactions and to interact with trusted professional clinicians and peers in a non-judgmental, supportive environment is essential for the mental well-being of fire and rescue personnel.

Objective

The “stress response” is generally associated with events that are perceived as threatening or demanding, but the specific events that fall into that category vary tremendously. For fire and rescue personnel, “stress” is a fact of life, but stress reactions produced by involvement in emergency situations differ from person to person.

The Fairfax County Fire and Rescue Department OHSP is committed to providing skilled mental health professionals, familiar with the fire and rescue workers’ environment, to assist personnel during times of professional and personal crisis.

Service Line 1. Critical Incident Stress Management (CISM).

Definition and Purpose

The Department defines a “critical incident” as any situation faced by personnel that may cause unusually strong emotional reactions with the potential to interfere with one’s ability to function normally. Seemingly insignificant incidents may become critical incidents due to an accumulation of stress over time. The OHSP CISM Program strives to provide well-trained clinicians and peers to identify and counsel individuals who are experiencing difficulty in coping with a critical incident.

Content

The CISM Program includes pre- and post- stress activities, including defusing and debriefing, and utilizes trained clinicians and CISM peer support counselors to assist fire and rescue personnel cope with individual incidents and prevent burnout or post-traumatic stress disorder (PTSD).

CISM Peer Support Counselors. The OHSP seeks to provide professional intervention after significant incidents in order to minimize stress-related problems which may impact job performance and mental health. This is accomplished through use of Peer Counselors, working in concert with trained clinicians, to provide stress debriefings to employees. Stress debriefings can be requested by individual fire and rescue personnel or by senior personnel who identify a

need for such debriefings. They may be performed immediately following an incident or when personnel return from an out-of-state and/or country mission such as the Oklahoma City bombing incident. CISM Peer Support Counselors are on call via beeper or telephone around the clock. To contact a CISM Peer Support Counselor, call the Public Safety Center at (703) 280-0824 or 0825 and ask to have the Counselor on duty paged.

CISM Peer Support Counselor Training. CISM peer support counselors are fire and rescue personnel who volunteer to become part of the program. Training for these individuals is provided by the OHSP via programs sponsored by the Virginia Critical Incident Stress Debriefing (C.I.S.D.) Committee and the State EMS Advisory Board. Training is accomplished by Virginia-approved CISD instructors.

Critical Incident Stress Debriefings. Critical incident stress debriefings may be conducted immediately following an incident, a few days later, or following the return of fire and rescue personnel from a stressful out-of-state or country mission. These debriefings, led and facilitated by a mental health professional, supported by Peer Support Counselor(s), are conducted in a strictly confidential manner (e.g., rule followed is “What is said in this room stays in this room.”). Only personnel involved in the incident, the mental health professional and the Peer Support Counselor(s) are present. Counselors assess each attendee and provide a structured and safe environment for discussions. In cases where problems are beyond the scope of the debriefing, clinicians can direct individuals to appropriate sources of help; i.e., EAP, etc..

Spiritual Health

The spiritual part of an individual may or may not be thought of in a religious sense. Everyone has a “spiritual part” and it is there that we attempt to “make sense of” or find “meaning” in life. Whether or not an individual considers him/herself to be a “religious” person, good spiritual health can be a major factor in achieving a positive emotional state.

Definition and Purpose

Fire and rescue personnel are intimately involved with pain, suffering and injustice on a regular basis. Spirituality – which pertains to belief in some power greater than ourselves – brings comfort and hope. This in turn affects an individual’s relationships and continued positive direction. Provision of avenues to allow fire and rescue personnel to develop and maintain good spiritual health is a key goal of this Program.

Service Line 1. Chaplain Services

Definition and Purpose

A well balanced, full service mental health program must include provisions for maintaining and enhancing the spiritual needs of employees. The Fire and Rescue Department OHSP provides such services via Department-dedicated volunteer chaplains.

Content

Chaplains are appointed by the Fire Chief and services for employees are usually requested by the Fire Chief or his designee.

The chaplain provides services in a non-denominational manner and can be particularly effective in cases involving serious injury and/or line-of-duty deaths and subsequent notification of family members, suicides involving fire and rescue personnel or their family members, and personal tragedies such as the loss of a spouse, child or parent. Additionally, chaplains may be called upon to visit injured personnel, serve as a liaison with an individual's personal minister who may not be aware of job stresses, or provide spiritual counseling for families in times of crises. In cases where problems are beyond the scope of the chaplains' authority, they can direct employees to appropriate sources of help. Chaplains also serve a ceremonial role by offering the invocation at weddings, funerals or other Department functions.

Training/Certification

Although chaplains in service to fire and rescue departments are skilled in certain counseling techniques (grief counseling, etc.), the Fairfax County Fire and Rescue Department OHSP intends to review requirements of its program and provide opportunities for additional training and/or certification. Areas under consideration for additional training include identifying stress-induced problems, appropriate support procedures, circumstances warranting communication with Fire and Rescue Department senior staff members, and recognizing needs for direct medical intervention.

The health community, as well as Government entities and the general public, have come to recognize that much illness and premature mortality are caused by specific human behaviors. Phrased differently, these groups now understand that

individuals are very much in charge of their own health status. Thus, the promotion of appropriate health behavior represents an important medical thrust. The former Secretary of Health and Human Services, Dr. Louis W. Sullivan, noted that Americans “are coming to realize the influence that they, themselves, can have on their own health destinies and on the overall health status of the nation.” (*Healthy People 2000: National Health promotion and Disease Prevention Objectives*, 1990)

Component 4 - *Health Promotion & Education*

Definition and Purpose

The health and productivity of an organization, such as the Fairfax County Fire and Rescue Department, obviously is a function of the health of individual employees. Employee health is essential for organizational productivity. However, while the point of Dr. Sullivan that employees have great control over their own health is well taken, an organization has real responsibilities itself. An employee frequently cannot do it on his/her own. For a health enhancement program to be successful, each individual should be considered as one element within a larger occupational health program.

Objectives

The Fairfax County Fire and Rescue Department Occupational Health and Safety Program is developing a health enhancement plan. Under this plan, the Department works with higher management authority for approval and for resources, provides the necessary guidance and educational materials to support improved health behaviors, and reviews the program so that corrections can be made to the plan as necessary. Contract personnel will work closely with Department staff to ensure that the health enhancement plan is effective and remains current.

COMPONENT 4. HEALTH PROMOTION/EDUCATION - Major Program Elements -
<ul style="list-style-type: none">● Health Promotion● Health Status Reporting● Education/Mandated Training

Health Promotion

Definition and Purpose

The first step in developing a health promotion effort is to prepare the plan. While epidemiological studies of cardiovascular disease and cancer, for example, make it clear that behaviors are very important in the etiology of these diseases, the most effective strategy for changing these behaviors is not as clear. However, agreement does exist on the broad elements to include in a health promotion plan. First, one must address key lifestyle issues that impact health. The list of these issues includes:

- Smoking cessation
- Substance abuse awareness
- Sleep/rest requirements
- Weight control
- Stress management
- Nutrition
- Cancer prevention/awareness
- Hypertension Management
- On and off-the-job exposure issues
 - Sunlight
 - Noise

Second, provisions must be identified for developing a broad health orientation throughout the Fire and Rescue Department and for presenting specific health messages. While many studies have shown that simply exposing employees to health messages has little effect, a health-oriented work environment apparently provides useful support for more focused health interventions.

Third, the health promotion plan must provide for individualized behavioral counseling, delivered in a personal and consistent manner, to high-risk employees. The identification of employees in need of personalized behavioral counseling should be made by the Fire and Rescue Department physician on the basis of periodic health screenings and/or results of annual physical examinations. The counseling itself may come through the Employee Assistance Program or through use of outside resources.

Finally, health promotion initiatives must be maintained and reinforced for some period of time. Some industrial efforts have found that a program must be in place for at least one year before meaningful behavioral change can be noted in employees. Also, the plan must provide for objective evaluations of progress at defined intervals.

Service Line 1. Health Promotion/Education Plan.

Definition and Purpose

A priority listing of health-risk behaviors must be prepared. Well-known topics, such as smoking cessation, substance abuse awareness, and nutrition, will be reviewed in light of FRD requirements. For example, smoking cessation, while of obvious importance, might not have top priority in view of the fact that all persons entering the Department since 1985 have signed a no smoking contract, covering both on and off-the-job behavior. The extent to which smoking behavior actually is a problem now should be discussed and, if necessary, investigated.

Content

The health promotion plan will be reviewed on an annual basis to determine if it properly addresses topics of concern to the Fire and Rescue Department.

Service Line 2. Health Promotion Packages

Definition and Purpose

Health promotion materials must be prepared to support the health campaign directed at each of the health/education topics identified in Service Line 1. Particular materials selected for each topic depend on the nature of the topic and the kind of message to be delivered. Also, the messages and delivery media will be selected to target the population of interest, in this case fire and rescue personnel, in order to increase effectiveness of the message and to enhance employee identification with the program.

Content

Media for delivering health messages include:

- Health bulletins
- Video tapes
- Health charts
- Demonstrations/presentations
- Others

The above media can present health messages in a variety of contexts. One way is in conjunction with health screening activities. For instance, the National Institutes of Health promotes a "Hypertension Awareness Month" effort to encourage all Government agencies both to screen employees for hypertension status and to educate employees concerning the effects of high blood pressure. While NIH prepares some educational materials, such a screening program provides an excellent opportunity for the Fire and Rescue Department OHSP to present personalized messages. Results of the screening, employing national norms to describe hypertension status,

can be used to compare the cardiovascular health of fire and rescue personnel with that of the nation. Such information becomes a valuable part of the Departmental health report described in Service Line 1 of Health Status Reporting.

Service Line 3. Individual Counseling

Definition and Purpose

Encouraging good health practices by individuals facilitates the health of the entire workforce. The FRD OSHP wants all uniformed fire and rescue personnel to achieve their full health potential. Identifying and “targeting” individuals and/or select groups in need of individual health counseling is a means of furthering this goal.

Content

The Fire and Rescue Department physician will review instances in which the health promotion/education effort identifies any employees with health problems requiring individual attention above and beyond the simple presentation of health messages. Such individuals will be referred to Fire and Rescue Department management for subsequent attention through the Employees Assistance Program or by outside resources (i.e., nutritional counseling, etc.).

Health Status Reporting

Definition and Purpose

The Fairfax County Fire and Rescue Department Occupational Health and Safety Program Health Promotion/Education Program is a new component. Consequently, reliable data regarding the current health status of fire and rescue personnel are not available. These and other measures will assist Program managers in determining the success of this program and in efforts to improve and enhance the health of the workforce.

Service Line 1. Health Profile of the Department

Definition and Purpose

The selection of health promotion topics should be based, as noted, on the needs of the Department. Using results from annual physical examinations and health risk assessments, a report describing “The Health of the Fairfax County Fire and Rescue Department Uniformed Personnel” will be prepared.

Content

This effort should present summary statistics and appropriate discussions describing specific health dimensions such as cardiovascular health, identified cancer precursors, weight condition, and others. Over several years, information contained in this annual report can be used as a basis for assessing trends and thereby measuring progress made by the health promotion/education program.

Preparation of this annual report will be under the direction of the FRD OHSP. A copy of the report plan, as well as the final report itself, will be reviewed with the Fire and Rescue Department physician and appropriate Occupational Health Center staff members.

Service Line 2. Annual Report

Definition and Purpose

In order to properly manage the Occupational Health and Safety Program, each component within the Program must be reviewed periodically to assess both Program success and cost effectiveness.

Content

A brief annual report will be prepared which provides a summary evaluation of the health promotion/education effort and which presents statistics describing the year's effort. These statistics should indicate number and identification of health message used, number of employees exposed to health messages, number of individuals requiring personalized counseling, and other measurable and meaningful data. Summaries of employee feedback concerning program acceptance can also be presented.

Education/Mandated Training

Definition and Purpose

The Health Promotion/Education component of this Plan is responsible for educating fire and rescue personnel in health issues pertaining to lifestyle and behavior such as those discussed in Service Line 2 of "Health Promotion." Additionally, the Program is responsible for providing training mandated under Federal and State regulations.

Service Line 1. OSHA Bloodborne Pathogen Standard (29 CFR Part 1910.1030)

Definition and Purpose

The OSHA Bloodborne Pathogen Standard (29 CFR 1910.1030) seeks to minimize the health risk from occupational exposure to blood and other potentially infectious materials. One element within this standard is that of required (mandated) training for all employees who may be exposed.

Content

This training is an essential part of the OHSP Regulatory Compliance Program and will be provided all affected Department fire and rescue personnel. Training will be conducted in compliance with 29 CFR 1910.1030.

For information regarding the bloodborne pathogen training program please see:

Component 6, Regulatory Compliance. Service Line 2 under “Federally Mandated Standards/Regulations”

Service Line 2. Respiratory Protection Program.

Definition and Purpose

The primary objective of the OSHA Respiratory Protection Program Standard (29 CFR 1910.134) is to prevent excessive exposure to hazardous occupational airborne contaminants. Employers are responsible for providing training for all employees required to wear a respirator.

Content

Training will be conducted in compliance with 29 CFR 1910.134. For information regarding the respirator training program please see:

Component 6, Regulatory Compliance. Service Line 1 under “Federally Mandated Standards/Regulations”

Service Line 3. Asbestos (29 CFR 1910.1001)

Definition and Purpose

The OSHA Asbestos Standard (29 CFR 1910.1001) applies to all occupational exposures to asbestos in all industries covered by the Occupational Safety and Health Act.⁴ It is the intent of this standard to minimize health risks associated with asbestos exposure and to provide appropriate workplace and medical surveillance guidelines for individuals working in or otherwise exposed to an environment containing asbestos materials.

Content

Training will be conducted in compliance with 29 CFR 1910.1001. For information regarding the asbestos training program please see:

Component 6, Regulatory Compliance. Service Line 3 under “Federally Mandated Standards/Regulations”

Service Line 4. Other Required Training

Definition and Purpose

The Fairfax County Fire and Rescue Department Occupational Safety and Health Program is reviewing current training programs and reviewing compliance requirements set forth by Federal and State agencies. As the Program matures, other areas requiring training will be added to this component and to Component 6, Regulatory Compliance.

Content

All training programs within the OHSP will be implemented in accordance with Federal and State requirements.

⁴ Exceptions include ship repairing, shipbuilding and shipbreaking employments and related employments as defined in 29 CFR 1915.4. Exposure to asbestos in these employments is covered by 29 CFR 1915.191.

The basic premise of any safety program is that safety considerations must be factored into all phases of training, personnel management, equipment use, and work performance. The safety record of an

organization depends on the health of the worker, training regarding both general and specific performance requirements, proper use and maintenance of all work equipment, and the development of a safety orientation and good safety practices by each employee.

Component 5 - *Safety and Prevention*

Objective

1. Provide a dedicated staff of professionals (Safety Officers, administrative assistant, etc.) with education, training and experience in safety and prevention. This staff will establish and maintain an OHSP program of proactive safety management committed to continuous improvement.
2. Provide Fairfax County fire and rescue personnel with all tools necessary to ensure a safe and comfortable work environment.
3. Ensure that all fire and rescue personnel are, from a safety perspective, in a constant state of readiness for response to emergency situations.

COMPONENT 5. SAFETY AND PREVENTION - Major Program Elements -	
	<ul style="list-style-type: none">● Claims Reporting● Inspections● Investigations● Incident Scene Safety● Training

Claims Reporting

Definition and Purpose

Appropriate and accurate reporting for all types of claims is an essential part of the Safety Officer's job requirement. Claims for personal injury must be reviewed for completeness and accuracy and filed in a timely manner in order to ensure proper compensation for employees; claims made by

County citizens must be carefully reviewed and tracked to ensure the appropriateness of such claims and to maintain County integrity. All claims received by Safety Officers must be handled according to policies and procedures set forth by Federal, State and County regulations and/or requirements. Proper claims reporting and recordkeeping procedures are necessary to provide accurate information regarding all types of incidents identified in service lines below and to document identified recommendations for the prevention of similar occurrences. (Appendix C, "Claims Reporting Procedures," **Risk Management Manual**, Section CL-1-87).

Service Line 1. Personal Injury Claims

Definition and Purpose

Personal injuries are costly for the County and for the individual who has suffered an injury. In order to facilitate the claims process, and to comply with established County procedures, Safety Officers must be notified of all instances of personal (occupational) injury within the County of Fairfax Fire and Rescue Department, regardless of whether or not the injury requires time off from work. Notification is usually made by either the work location supervisor or the Public Safety Communications Center (PSCC). Once the Safety Officer is "in the loop," he/she can then assist the injured employee in filing the claim, remain apprised of work status changes, and conduct the required investigation.

Content

The primary responsibility for administration/case management of occupational injury cases rests with the Fairfax County Risk Management Division. In order to ensure that the Risk Management Division can process and track cases in an appropriate and efficient manner, a complete "injury report package" must be submitted. Required documentation for personal injury claims includes:

- FIN 56 - Medical Status Form(s)
- FIN 57 - Employee Notice of Injury/Illness
- FIN 66A - Secondary Employment Form
- Employer's First Report of Accident (State: IC Form No. 3)
- FIN 58 - Supervisor's Accident Investigation Report)
- FSA 317 - Narrative Supplement (if necessary)
- Authorization for Medical Information (Trigon Administrators, Inc. Form)
- Safety Officer's Investigative Report

The Safety Officer serves to guide injured employees through the paperwork process and to ensure that all personnel involved (supervisors, etc) are aware of requirements for claim filing. The Safety Officer works with other members of the Occupational Health and Safety Program in assuring timely and accurate paperwork completion and distribution. Please see Appendix A (MOU between Risk Management and Fire and Rescue Department) to review claim form process procedures for fire and rescue personnel.

It is incumbent upon fire and rescue personnel to complete their injury packet and give it to the shift supervisor prior to the end of their shift. The investigating supervisor is then required to provide this packet to the Safety Officer within 48 hours of receipt from the injured employee. The Safety Officer will review the packet for completeness and accuracy, forward the original package to Risk Management and a copy to Health Programs. Adherence to this process will reduce time required to process claims and consequently aid in cost savings for the County.

Service Line 2. Citizen Injury Claims

Definition and Purpose

Fairfax County is well-known for providing exemplary public safety services and for its concern for all County citizens. Should a citizen of the County be injured while on County property or while in the care of fire and rescue personnel, procedures are in place to allow the citizen redress by filing a "Citizen Injury Claim." Safety Officers should be made aware of any incident(s) that may result in a citizen injury claim to ensure that the incident is appropriately documented, reported, tracked and investigated.

Content

Paperwork requirements (claims reporting) for a citizen injury report include:

- FIN 53 (Citizen Injury Report)
- Witness statements - if applicable
- Safety Officer's Investigative Report

Service Line 3. Citizen Property Damage Claims

Definition and Purpose

Emergency response requires rapid deployment of personnel and equipment. During the course of these activities, occasional damage to personal property within the County may occur. When there is an incident involving damage to a citizen's property, Safety Officers shall be informed so they can, when required, conduct an investigation.

Content

Paperwork requirements (claims reporting) for a citizen property damage claim include:

- FIN 54 (Citizen Property Damage Report)
- Written statements from the officer in charge (OIC) and/or witnesses - if applicable
- Photographs - when available
- Safety Officer's Investigative Report

Service Line 4. Property Loss Claims

Definition and Purpose

Property loss, as defined by the Fire and Rescue Department, includes property that has been lost, stolen or damaged (not including normal “wear and tear”). Examples include damaged self-contained breathing apparatus (SCBA’s), turnout gear damaged in fire, equipment falling from apparatus and lost/stolen radios. Some vehicle damage reporting also requires submission of form FIN 55 (see Service Line 5 under “Claims Reporting”). Responsibility for ensuring proper handling of County property loss claims lies with the Office of Resource Management. However, Safety Officers should be apprised of incidents requiring the filing of a property loss claim in order to facilitate proper documentation, reporting and replacement.

Content

Paperwork requirements (claims reporting) for a County property damage claim include:

- FIN 55 (County Property Loss)
- Written statements - if applicable
- Photographs - if applicable
- Safety Officer’s Investigative Report

Service Line 5. Vehicle Accident Claims

Accidents involving any County vehicle must be reported to a Safety Officer in a timely manner. Reporting of vehicle accidents is necessary to ensure that an investigation is conducted if necessary, proper paperwork for repair requests is completed and distributed, and to provide an opportunity to determine appropriate recommendations for prevention of similar occurrences.

Definition and Purpose

For reporting and documentation purposes, accidents involving County vehicles are grouped into two categories: (1) minor vehicle incidents and (2) vehicle accidents. Determination of a “minor vehicle incident” is made by the Safety Officer in conjunction with the duty Battalion Chief. Accidents reported as “minor” must also be considered “non-preventable.” Examples of such incidents include: chain damage, limbs hitting/scraping the vehicle, road debris striking the vehicle, or vehicle parked when damaged. Safety Officers must be informed when any County vehicle has been involved in an accident or been otherwise damaged to ensure proper reporting, documentation, and investigation.

Content

Claims reporting requirements for minor vehicle incident and vehicle accidents are as follows:

Minor Vehicle Incident Reporting	Vehicle Accident Reporting
FIN 55 (Property Loss Report) Photographs Safety Officer's Investigative Report	Fairfax County Vehicle Accident Report Form FCPD Report (no police report required for accidents occurring at fire stations) Written statements Photographs Battalion Chief's Report Safety Officer's Investigative Report

Service Line 6. Accidents Involving Personal Vehicles

Fairfax County does not insure personal vehicles for collision or physical damages sustained while conducting County business. The County's self-insurance coverage only applies where liability or third party damages are in excess of the limits of the employee's personal automobile insurance policy.

Definition and Purpose

As stated above, the County is not responsible for accidents involving personal vehicles. County employees wishing to complete requisite paperwork to be filed with the Risk Management Division for record purposes may do so.

Content

There are no County-required claims reporting procedures for accidents involving personal vehicles. However, an employee may wish to complete a "Fairfax County Vehicle Accident Report" and provide appropriate copies to the Risk Management Division for record purposes only.

Inspections

Definition and Purpose

Fairfax County Fire and Rescue Department Occupational Health and Safety Program Safety Officers are thoroughly dedicated to ensuring the safest possible work environment for all fire and rescue personnel. For fire and rescue personnel, "work environment" may be the fire station, the emergency scene, or the vehicle used for transport to the scene. For this reason, various types

of Safety Inspections are performed by Safety Officers on a regular basis. It is important to note, however, that these Safety Inspections are not intended to relieve other Fire and Rescue personnel (i.e., work location supervisors) of their responsibilities relating to the maintenance of facilities, care of apparatus and/or equipment, and monitoring subordinates' personal protective equipment. Safety Inspections are designed to enhance safety awareness for each member of the Fire and Rescue Department.

Service Line 1. Facility Inspections

Definition and Purpose

On-site Facility Inspections of all Fairfax County fire stations are conducted three times per year. These inspections are conducted to ensure that fire and rescue personnel are provided a safe work environment and that each facility meets all applicable Federal, state and local codes and regulations.

There are two types of annual facility inspections. The first is the “formal” facility inspection which is conducted for the station commander at each fire station. This inspection is done by the Safety Officer, the appropriate Deputy Chief, the assigned Battalion Chief, a member of the FRD’s facility team and the Safety Manager for the Risk Management Division. The second type of facility inspection is less “formal” in tone in that fewer personnel are involved. This type of inspection is conducted for the shifts in the same work locations, and is done by the Safety Officer and the shift commander. A Battalion Chief and/or a member of the FRD’s facility team may choose to attend.

The OSHP Safety and Prevention Program recommends that these two types of annual facility inspections be scheduled and conducted four months apart. This allows for three annual inspections of each facility.

Content

During each facility inspection, a thorough review of the entire facility – interior and exterior – is completed. The following is a listing of broad areas which are inspected. This listing is provided to indicate the breadth of these inspections. Please see Appendix C for a complete listing of items reviewed by Safety Officers during these inspections.

FACILITY INSPECTIONS	
Overview of Items Addressed	
●	Paths of egress
●	Fire protection issues
●	Electrical
●	Floor conditions
●	Work shop area
●	Storage
●	Apparatus issues
●	Information posted

Upon completion of the inspection, the Safety Officer prepares a comprehensive report detailing all findings (positive and negative). In instances where issues requiring corrective action are identified and documented, the Safety Officer requests that the station provide him/her with a plan of action for corrective measures within 30 days of receipt of the report.

A copy of all facility inspection reports is sent to the Station Commander, Shift Commander (if appropriate), Battalion Chief, County Volunteer Liaison (if appropriate), Risk Management, and Health Programs. Copies of reports are maintained by the Safety Officer(s) to ensure timely follow-up on any corrective measures required.

Service Line 2. Apparatus Inspections

Definition and Purpose

Inspections are performed by a Safety Officer at least annually to ensure fire and rescue personnel are adequately protected during operation of Department apparatus. These inspections are intended to augment other regularly scheduled inspections (annual EMTA inspection to meet Department of Motor Vehicles minimum standards for motor vehicle safety; inspections performed by Apparatus Section to test ladders, pumps and other special features). During these annual inspections, the Safety Officer checks for any unreported or unseen safety concerns which may occur between these other regularly scheduled inspections. Safety Officer inspections include each piece of apparatus assigned to their facility inspection stations. Safety Officer Apparatus Inspections may be conducted more frequently depending on workload and/or notification of specific problems.

It is recommended that the work location supervisor accompany the Safety Officer during these inspections. The assigned vehicle operator may also be included as part of the inspection team.

Content

All pieces of apparatus are thoroughly inspected. Areas of concern for apparatus inspections conducted by a Safety Officer are provided below.

If any apparatus is identified as being an imminent danger/hazard (may cause personal injury or contribute to a motor vehicle accident), it will be removed from service. Deficiencies identified that do not pose an immediate hazard to personal safety but which retain the potential for injury, will be dealt with on a priority basis. Existing County-approved procedures for repairs should be followed for all other deficiencies (FSA 84's, CAD repair notices, etc.).

Safety Officer reports (memorandum) of inspection results are provided to (1) the work location supervisor requesting, or participating in, the inspection and (2) the Captain, Safety Section. Direction regarding individual apparatus inspection issues is provided on an "as needed" basis.

Apparatus Inspections	
Exterior of Unit A. Tires B. Visual warning devices C. Audible warning devices D. Parked w/doors closed E. Mirrors remain in place once adjusted F. Windows	SCBA A. Secure B. Current test date C. P.A.S.S. unit D. Air pressure E. Straps/buckles
Interior of Unit A. Seat belts/shoulder harness B. Equipment secured C. Height of unit posted D. Defroster/heater operate properly E. Clear field of vision F. Vehicle Accident package present G. Seat adjust to driver & remains in position H. Intercom works	

Service Line 3. Equipment Inspections

Definition and Purpose

Safety Officers randomly inspect all equipment used by the Fire and Rescue Department to ensure that safety features provided are functional and that no parts of the tool/equipment have the potential to injure personnel. These inspections are conducted at least annually and may occur more frequently depending on workload and/or notification of specific equipment problems. In addition to these annual Safety Officer inspections, assigned Fire and Rescue Department members complete a daily inspection of equipment to ensure that it is operational. The Apparatus Section provides routine maintenance for various tools to enhance the life expectancy of the equipment. Safety Officer inspections are intended to augment these other inspections and to check for any unreported or unseen safety concerns which may have been overlooked.

It is recommended that the work location supervisor or his/her designee accompany the Safety Officer during these inspections. The assigned operator of the vehicle the equipment is assigned to may also be included as part of the inspection team.

Content

Equipment/tools are carefully inspected to ensure they are in good working order and that there are no identifiable flaws/inadequacies which have the potential to injure a member.

If any equipment is identified as being an imminent danger/hazard (may cause personal injury), it will be removed from service. Deficiencies identified that do not pose an immediate hazard to personal safety but which retain the potential for injury, will be dealt with on a priority basis. Existing County-approved procedures for repairs should be followed for all other deficiencies (FSA 84's, CAD repair notices, etc.).

Safety Officer reports (memorandum) of equipment inspection results are provided to (1) the work location supervisor requesting, or participating in, the inspection and (2) the Captain, Safety Section. Direction regarding individual equipment inspection issues is provided on an "as needed" basis.

Service Line 4. Personal Protective Equipment (PPE) Inspections

Definition and Purpose

Ensuring that all personal protective equipment (PPE) used by fire and rescue personnel is in top shape is a priority for Safety Officers. Proper use and maintenance of PPE saves lives and greatly facilitates one's ability to minimize toxic and/or infectious disease exposure. Consequently, inspections of PPE are conducted regularly. An overview of required PPE inspections is provided below.

PERSONAL PROTECTIVE EQUIPMENT INSPECTIONS		
<i>INSPECTOR(s)</i>	<i>FREQUENCY</i>	<i>ITEMS ADDRESSED</i>
Vendor Resource Management staff Academy staff	Initial inspection	Careful review of all items - to include fit check.
User (fire and rescue personnel)	After each use: non-emergency & emergency	Inspect for burns, cuts and appearance of discoloration due to exposure to heat and/or chemicals
Shift Commander	Monthly	Careful review of all items
Safety Officer	Semi-Annually and "as needed"	Careful review of all items. Normally conducted prior to any scheduled cleaning to ensure hazards or potential hazards are repaired by appropriate vendor. One semi-annual inspection to include fit check.

Content

Safety Officers use the published "Inspection Guideline/Personal Protective Equipment" which describes areas to inspect for each piece of gear (Appendix C). Broad topic areas included in this guideline are (1) coat outer shell, coat inner shell, trousers outer shell, trousers inner liner, helmet, boots, gloves, hood, and eye protection. Each broad topic has subsets of areas requiring inspection. Upon completion of the inspection(s), an "Inspection Worksheet" which summarizes findings of the Safety Officer is completed. Safety Officers also send a memorandum to all shift commanders reminding them of any forthcoming cleaning schedule for their workforce.

Cleaning/Repair: If any item of PPE is found to be damaged, the shift commander shall complete form FSA 84 to accompany the item in need of repair. This procedure is to be followed in all instances except for regularly-scheduled cleaning(s). Documentation shall include:

- Emergency incident number causing the damage
- Incident address
- Incident type
- Incident date

If the damage did not occur on an incident, the shift commander must provide a brief description of how the damage occurred and the date of occurrence.

Investigations

Definition and Purpose

Safety Officers are responsible for ensuring that all incidents involving personal injury, vehicle accidents, citizen property damage and/or citizen injury are investigated. These investigations are conducted in order to determine the direct, indirect and/or associated factors that contributed to the incident. The Safety Officer must identify inadequacies involving:

PPE protection	Apparatus
Rules and Regulations	Supervision
Training	Performance
Any other safety-related issue(s)	

Investigations should determine “who, what, when, where, why and how” for each incident. The intent of these investigations is not to find fault but rather to determine the cause(s) and make recommendations which specify actions to prevent similar occurrences. “Cause” may cover a broad range of factors from mechanical to human error.

Service Line 1. Personal Injury

Definition and Purpose

Safety Officers must be notified of all instances of personal (occupational) injury within the County of Fairfax Fire and Rescue Department, regardless of whether or not the injury requires time off from work. Investigations of all incidents must be accomplished in order to properly document information for potential workers’ compensation claims and to determine actions that may be recommended to prevent similar incidents.

Content

For injuries involving fire and rescue personnel, station supervisors shall notify the Safety Officer of an incident and provide him/her with completed paperwork (injury report package) prior to the end of the shift during which the incident occurred. The Safety Officer will schedule an appropriate time for conduct of the required investigation upon notification of a personal injury.

Paperwork requirements (claims reporting) are outlined in Service Line 1 of the section titled “Claims Reporting” in this Program component.

Service Line 2. Vehicle Accidents

Definition and Purpose

Safety Officers must be apprised of all vehicle accidents which involve County vehicles. As mentioned in Service Line 5 of the section titled "Claims Reporting," vehicle accidents are grouped into two categories: (1) minor vehicle incidents and (2) vehicle accidents. Both categories of accident are subject to a safety investigation and report. This is done to identify any recommendations to prevent future occurrences and to facilitate timely repair and return of vehicles to active duty.

Content

Investigative responsibilities for all accidents involving County vehicles include:

County Vehicle Accident Investigations	
Minor Incident Investigation	Accident Investigation
Conduct prompt and complete investigation	Ensure medical care has been provided if required
Determine that full report is not required (consult with Battalion Chief)	Ensure Fairfax County Police Department is investigating
Take photographs for filing/reporting if applicable	Ensure completion of Fairfax County Vehicle Accident Report Packet
	Take photographs
	Ensure witness statements completed if applicable
	Complete Safety Officer's Accident Investigation Worksheet for Vehicle Accidents

Paperwork requirements (claims reporting) are outlined in Service Line 5 of the section titled "Claims Reporting" in this Program component.

Service Line 3. Property Damage, Loss, Citizen Injury, Other

Definition and Purpose

Safety Officers must investigate all incidents within the County which have resulted in damage to private property and/or injury to a County citizen which occurs while on County property or while under the care of the Fairfax County Fire and Rescue Department. These investigations are conducted to ensure that the County is adequately informed of such incidents, to protect the citizens, and to minimize potential for litigation. Incidents involving the loss or theft of Department

equipment such as radios, vehicle equipment, etc. are handled by the County's Resource Management office. Safety Officers, however, should also be apprised of such incidents to ensure an orderly flow of information.

Content

Procedures to be followed for these investigations include:

Safety Investigation Procedures for Personal Property Damage, County Property Loss, Citizen Injury		
Citizen Property Damage	Citizen Injury	County Property Loss (Resource Management)
Conduct prompt and complete investigation to: (1) provide summary of facts; (2) establish cause; and (3) identify corrective actions taken or recommendations of corrective actions to be taken.	Conduct prompt and complete investigation to: (1) provide summary of facts; (2) establish cause; and (3) identify corrective actions taken or recommendations of corrective actions to be taken.	Conduct prompt and complete investigation to: (1) provide summary of facts; (2) establish cause; and (3) identify corrective actions taken or recommendations of corrective actions to be taken.
Ensure completion of Citizen Property Damage Report (FIN 54)	Ensure appropriate medical care has been provided if required	Ensure completion of County Property Loss Report (FIN 55)
Advise citizen(s) to contact County's Risk Management Division	Advise citizen(s) to contact County's Risk Management Division	Ensure investigation by FCPD if property is suspected stolen
Submit reports to Safety Office within 24 hours	Ensure completion of Citizen Injury Report (FIN 53)	Photograph any damaged equipment
Do not direct citizen to get repairs	Submit reports to Safety Office within 24 hours	Submit reports to Resource Management within 24 hours
Do not make statements that may compromise the County's liability	Do not make statements that may compromise the County's liability	

Paperwork requirements (claims reporting) are outlined in Service Lines 2 (Citizen Injury), 3 (Citizen Property Damage) and 4 (Property Loss) of the section titled "Claims Reporting" in this Program component.

Incident Scene Safety

Responsibility for scene safety begins with each individual member. Fire and rescue personnel must be accountable for their own safety. They must be cognizant of their surroundings, aware of their own physical limitations and mindful of the potential for accidents. Incident commanders,

sector commanders and other unit officers are also responsible for their own safety and for the safety of members operating under their supervision. They must understand what the incident strategy is, the tactics to employ to complete their assignments, and ensure that no one gets hurt during the process.

Definition and Purpose

The role of the Safety Officer on an incident scene is to assist the incident commander in detecting unsafe acts or potentially unsafe conditions and make recommendations to alter – or suspend – those activities posing a risk to members.

The Safety Officer is concerned with **safety**. His/her role begins with reminders to members to put their gloves on, pull their helmet shields down, etc. – but it goes much further. Safety Officers must anticipate events. What will happen to a structure if fire conditions worsen in the roof trusses? Is a floor stable enough to support fire operations, rescue operations, or overhaul? Does traffic need to be diverted from an ambulance so patients can be loaded safely? When will air conditions be safe enough to allow members to remove breathing apparatus?

In addition to remaining constantly attuned to the situation, the Safety Officer must also try to identify and prevent situations conducive to injury. Fire and rescue personnel may become so focused on the job requirements that they develop “tunnel vision” and become unmindful of their own safety. Poor judgment, lack of safety training, or a general poor attitude about safety are also issues a Safety Officer must be ready to identify and, if possible, correct.

Service Line 1. Air Monitoring

Definition and Purpose

It is the Safety Officer's responsibility to either perform air monitoring upon arrival at a scene where the quality of the atmosphere is compromised, or to ensure that such monitoring is being performed. Acceptable/unacceptable levels are determined by current OSHA and NIOSH regulations. The Safety Officer must ensure that all responding personnel are appropriately protected via proper use of self-contained breathing apparatus, and remain so until acceptable atmospheric conditions are met.

Content

Fire and Rescue Department companies responding to an incident carry air monitoring meters that are used to test levels of carbon monoxide, lower explosive levels (LEL), and oxygen concentration. Upon arrival at the scene, the Safety Officer will either begin air monitoring or ensure that monitoring is being performed. The Safety Officer will determine acceptable/unacceptable atmospheric conditions and inform fire and rescue personnel when it is determined they may safely remove self-contained breathing apparatus (SCBA).

Service Line 2. Reporting

Definition and Purpose

The Safety Officer prepares a report after each incident requiring the use of air monitoring equipment. These reports serve to inform Department management of any problems or concerns. A copy of all reports is maintained by the Safety Office for reference and, if required, follow-up.

Content

Reports generated from the incident scene provide details regarding any identified safety hazards and corrective actions taken to eliminate such hazards. Reports are forwarded to the Fire and Rescue Department Health and Safety Section for entry into the management information system. In instances where a high concern for unsafe actions by fire and rescue personnel on the incident is identified, a copy of the report is also forwarded to the Deputy Chief in charge of the shift during which the incident occurred.

Training

Definition and Purpose

Safety training is conducted by and for Safety Officers within Fairfax County. Training conducted by Safety Officers includes recruit training, firefighter training and officer training. Safety Officers strive to provide all fire and rescue personnel with information and training designed to enhance their appreciation of the importance of safety in all facets of job performance and to assist them in responding appropriately and in a safe manner in emergency situations.

Training conducted for Safety Officers includes training for full-time Safety Officers and Back-Up Safety Officers. Training for Safety Officers is provided to ensure that these individuals remain current in skills and are apprised of any changes in protocol, regulations or standards which may affect the way they conduct business. Back-Up Safety Officers are trained in procedures which are essential in the performance of work required by Safety Officers to ensure adequate coverage within the County when full-time Safety Officers are on leave or otherwise unavailable.

Service Line 1. Recruit Training

Definition and Purpose

Fire and rescue recruits receive extensive training at the County's Training Academy to ensure they are well versed in all aspects of the job. Training includes both classroom and "hands-on" simulations of actual emergency activities. During the course of recruit training titled "Essentials of Fire Fighting," a safety and health course is provided.

Content

The safety and health portion of “Essentials of Fire Fighting” is a 12-hour program. During this time, issues such as infectious disease control, proper procedures for injury reporting, and fire-based risk analysis are taught. All recruits must demonstrate knowledge in safety and health issues before graduating.

Service Line 2. Firefighter Training

Definition and Purpose

All County fire and rescue personnel receive ongoing formal and informal training in safety and health. Training is provided to ensure that personnel remain apprised of any changes in procedures and/or protocol and to encourage a positive attitude toward safety and health concerns.

Content

Formal training is provided during regularly scheduled Operational Academy Rotations (OARs). During OARs, safety topics are stressed during the first hour of class. Areas covered include fire-based risk analysis, accident trends, and personal protective equipment. Informal training is provided by Safety Officers during station visits. Safety Officers conduct daily visits to fire stations and rotate these visits to ensure coverage of all facilities at least three times per year. During these visits, Safety Officers conduct question and answer sessions, provide information on new procedures and protocol, and review concerns of fire and rescue personnel.

Service Line 3. Officer Training (Complete information not currently available on this Service Line - TBD)

Definition and Purpose

Content

Service Line 4. Back-up Safety Officer Training

Definition and Purpose

During the course of the year, there are occasions when at least one of the three County Safety Officers is off duty for a period of time. Absence may be due to scheduled vacation/leave, job-related travel requirements, injury or illness. When a Safety Officer is off duty for a period of time, coverage must be provided. The County provides training for one Back-Up Safety Officer per Safety Officer to act as an alternate.

Content

Back-Up Safety Officers receive the same basic training as Safety Officers. Additionally, they are required to complete two tours of duty with a full-time Safety Officer, participate in “ride alongs” with a Safety Officer, complete field rotation assignments, and familiarize themselves with documentation procedures described in this Component.

Service Line 5. Safety Officer Training (*Current/complete information not available on this Service Line - TBD*)

Definition and Purpose

Content

In 1970, Congress passed the Williams-Steiger Bill, (Public Law 91-596), better known as the Occupational Safety and Health Act of 1970. Since that time, concern for the health and safety of American workers has increased and further Federal

action has been brisk. Federal regulatory emphasis continues to be placed on the prevention aspects of occupational health. State concerns include prevention and appropriate treatment for workers injured on the job and/or exposed to occupational hazards. Industry recommendations (National Fire Protection Association, etc.) strive to provide guidelines for specific work environments and affected employees.

Component 6 - *Regulatory Compliance*

Objective

It is the intent of the Fairfax County Occupational Health and Safety Program to maintain and improve compliance with all Federal, State, and local regulations and to support industry-recommended standards for fire and rescue personnel such as the National Fire Protection Association (NFPA).

COMPONENT 6. REGULATORY COMPLIANCE⁵ - Major Program Elements -
<ul style="list-style-type: none">● Federally-Mandated Standards/Regulations● State-Mandated Standards/Regulations● Industry Standards

⁵This document provides summary information regarding applicable Federal, State and industry regulations/standards. Full text versions of all appropriate cited regulations and/or standards are maintained in the FRD OHSP Occupational Health Center. Full text versions should be consulted when questions or concerns arise.

Federally Mandated Standards/Regulations

Definition and Purpose

The stated purpose of the Occupational Safety and Health Act of 1970 (Public Law 91-596; as amended by Public Law 101-552, Section 3101, November 5, 1990) is:

To assure safe and healthful working conditions for working men and women; by authorizing enforcement of the standards developed under the Act; by assisting and encouraging the States in their efforts to assure safe and healthful working conditions; by providing for research, information, education, and training in the field of occupational safety and health; and for other purposes.

The Fairfax County Occupational Safety and Health Program supports the goals of the OSH Act and the standards developed under the Act. The Program recognizes that there are both legal and humanitarian bases for maintaining and improving compliance with these standards and consequently strives to provide safe and healthful working conditions for all uniform fire and rescue personnel and programs which are in full compliance with Federally-mandated standards and/or regulations.

Service Line 1. Respiratory Protection Program.

Definition and Purpose

The primary objective of the OSHA Respiratory Protection Program Standard (29 CFR 1910.134) is to prevent excessive exposure to hazardous occupational airborne contaminants. Employers are responsible for determining which work situations require respiratory protection and providing proper respiratory protection to meet the needs imposed in these situations.

Content

The required steps for this program include:

Respiratory Protection Program (29 CFR 1910.134)	
(1) Written standard operating procedure(s)	(2) Selection guidelines
(3) Training programs	(4) Respirator maintenance guidelines
(5) Surveillance program	(6) Medical clearance for usage
(7) Fit testing program	(8) Quality assurance program

The Fairfax County Occupational Health and Safety Program *Respiratory Protection Program* incorporates all requirements of the OSHA Standard in a comprehensive package. The County's respiratory protection program is designed to minimize and/or eliminate exposure to hazardous occupational airborne contaminants for uniformed Fire and Rescue Department personnel.

The respiratory protection program covers all uniformed fire and rescue personnel who could reasonably anticipate contact with hazardous occupational airborne contaminants and who require respirator protection during job performance.

A brief summary of mandated elements of the Plan follows:

Operating procedures. Written standard operating procedures governing the selection and use of respirators must be enforced.

Selection Guidelines

- Respirators shall be selected on the basis of hazards to which the worker is exposed.
- Respirators shall be selected from among those jointly approved by the Mine Safety and Health Administration and the National Institute for Occupational Safety and Health (NIOSH) under the provisions of 30 CFR Part 11.⁶
- Respirator selection shall be in accordance with the requirements of the American National Standards Practices for Respiratory Protection (ANSI 288.2-1969).

User Training. Fairfax County Fire and Rescue personnel are trained in proper use and maintenance of respirators and their limitations.

- Training shall be conducted for all new employees before starting active duty and prior to being placed in positions where exposure to hazardous occupational airborne contaminants can occur.
- Training shall be annually thereafter, or at any time when there are modifications of new tasks or procedures or new equipment is introduced into the Department.

Administrator(s) Training. Training for all personnel (i.e. Occupational Health Center contract and County Occupational Health and Safety Program members) involved in performing fit testing for fire and rescue personnel is a critical element in this program. OHC contract personnel are required to ensure that all staff members involved in the program are appropriately trained and qualified to conduct, record and report all aspects of fit testing. County-employed OHSP personnel involved in the program will be trained either in-house by personnel certified to conduct such training or via courses offered by private companies and/or Federal agencies.

⁶29 CFR 1910.134 is under review by OSHA. Until further notice the use of respirators approved under NIOSH standard 30 CFR 11 is allowed. Employees may continue using existing respirators until June 1998.

Maintenance Guidelines.

- Respirators shall be regularly cleaned and disinfected.
- Respirators shall be stored in a convenient, clean and sanitary location.
- Respirators used routinely shall be inspected during cleaning. Worn or deteriorated parts shall be replaced. Respirators for *emergency use*, such as self-contained breathing (SCBA) devices, shall be thoroughly inspected at least once a month and after each use.

Surveillance program.

- Appropriate surveillance of work area (environment) conditions and degrees of employee exposure or stress shall be maintained.
- Regular random inspections shall be conducted by a qualified individual (Safety Officer, etc.) to assure respirators are properly selected, used, cleaned and maintained.

Medical clearance. Fire and rescue personnel will not be assigned to tasks requiring use of respirators unless it has been determined that they are physically able to perform the work and use the equipment. The Fire and Rescue Department physician shall determine what health and physical conditions are pertinent. Medical status for all fire and rescue personnel in the Respiratory Protection Program will be reviewed annually.

Fit testing. Proper and effective fit testing, particularly for fire and rescue personnel, is the most important element in the respiratory protection program. In order to maximize protection for fire and rescue workers, established procedures must be clearly defined and rigorously followed. Persons performing fit testing must be properly trained and be able to verify the integrity and fit of the equipment since even the smallest break in the respirator seal can cause contaminated air to bypass the filtering elements and, consequently, put fire and rescue personnel at unnecessary risk.

Conditions that may adversely affect a proper fit include, but are not limited to, facial hair such as a beard or sideburns, skull caps, temple pieces on eyeglasses, and absence of dentures. Every effort will be made to assist employees in correcting any condition that affects achieving a proper fit. Fire and rescue personnel whose job duties require the use of a respirator will not be assigned such tasks until a proper fit is achieved.

There are two types of fit-tests: qualitative and quantitative. In qualitative fit testing, a specific challenge agent (saccharin, irritant smoke, bitrex, or isoamyl acetate) is introduced in the air surrounding the test subject who is wearing a respirator. The test subject then goes through a series of exercises (normal and deep breathing, moving the head side-to-side or up and down, talking) to stress the respirator facepiece seal to see if he/she can detect the challenge agent through odor, taste or irritation. If the challenge agent is detected, the respirator fit is considered unsatisfactory.

In a quantitative fit test, equipment measures the challenge agent both inside and outside the respirator as the test subject performs the exercises to stress the facepiece seal. The fit is considered unsatisfactory if the concentration of the challenge agent inside the mask vs. the concentration outside the mask is too high.

The Fairfax County OHSP has determined that due to work stresses encountered and the environment(s) in which fire and rescue personnel must perform at peak levels, quantitative fit testing will be performed for the majority of personnel in the program. Testing will be conducted in accordance with recommendations set forth in 29 CFR 1910.134, 42 CFR 84, and NFPA 1404.

Quality assurance. The Fairfax County OHSP will perform regular Respiratory Protection Program inspections and evaluations to determine the continued effectiveness of the program.

Service Line 2. OSHA Bloodborne Pathogen Standard

Definition and Purpose

The OSHA Bloodborne Pathogen Standard (29 CFR Part 1910.1030) seeks to minimize the health risk from occupational exposure to blood and other potentially infectious materials (OPIM)⁷.

Content

The required steps for this program include:

OSHA Blood borne Pathogen Standard (29 CFR Part 1910.1030)	
Exposure control plan	Hepatitis B vaccination
Engineering/work practice controls	Post-exposure evaluation and follow-up
Personal protective equipment (PPE)	Employee information and training
Housekeeping guidelines	Comprehensive record keeping

The Fairfax County Occupational Health and Safety Program *Exposure Control Plan for Occupational Exposure to Blood borne Pathogens* incorporates all requirements of the OSHA Standard in a comprehensive package. This exposure control plan is designed to reduce significant occupational exposure to Blood borne pathogens and infectious materials for uniformed Fire and Rescue Department personnel. Although HIV and Hepatitis B (HBV) are mentioned most often, this program applies to all Blood borne diseases. The two main components needed to implement this program are universal precautions and engineering/work practice controls.

⁷Other Potentially Infectious Materials (OPIM): Human body fluids including semen; vaginal secretions; cerebrospinal, synovial, and pleural fluids; saliva; any body fluid that is visibly contaminated with blood.

This program covers all uniformed fire and rescue personnel who could reasonably anticipate contact with blood or other potentially infectious materials during the performance of job responsibilities. The Occupational Health Center and all County stations maintain a copy of the Exposure Control Plan. A brief summary of mandated elements of the Plan follows:

Exposure Control Plan. Describes procedures that minimize uniformed Fire and Rescue Department personnel exposure to Blood borne pathogens. The plan includes three elements: (1) Employee Exposure Determination; (2) Schedule and Method of Implementation; and (3) Employee Exposure Evaluation.

Methods of Compliance. Describes the minimum standards for engineering controls, work practices, personal protective equipment, and housekeeping procedures to be instituted by the County for uniformed Fire and Rescue Department personnel who may be exposed.

Universal Precautions. The OSHA Blood borne Pathogen standard dictates that universal precautions must be followed by employees at all times whenever contact with potentially infectious materials is possible. The Fairfax Fire and Rescue Department *Exposure Control Plan for Occupational Exposure to Blood borne Pathogens* incorporates universal precautions and trains employees on appropriate procedures.

Engineering Controls and Work Practices. Engineering controls and work practices are used wherever possible to reduce or eliminate uniformed Fire and Rescue Department personnel exposures. If the potential for occupational exposure still remains after institution of these control measures, then personal protective equipment is used. Written information dealing with appropriate engineering controls and work practices such as hand washing; sharps/containers used for sharps; other potentially infectious waste; disposal of hazardous waste; hygiene, food and beverage; and laundry is provided as is training.

Personal Protective Equipment. The OSHA standard requires that appropriate equipment (i.e., gloves, face shields, masks, eye protection) be easily accessible at the work site and shall be provided at no cost to the employee. The County must also make provisions for cleaning, laundering, disposal, repair, and replacement of PPE as necessary.

Housekeeping. To the extent possible, the County must ensure the work site is clean and sanitary. Acceptable methods for cleaning, decontamination, and other specific housekeeping practices are described in the OSHA standard.

Hepatitis B Vaccination, Post-Exposure Evaluations, Follow-Up. A Hepatitis B vaccination program must be implemented for all uniformed Fire and Rescue Department personnel who may be at risk of exposure. The County makes the Hepatitis B vaccine available to all uniformed Fire and Rescue Department personnel who potentially have occupational exposures. Post-exposure evaluations and follow-up are also available to uniformed Fire and Rescue Department personnel who have sustained an exposure. In accordance with 29 CFR Part 1910.1030, these procedures are available at no cost to the uniformed Fire and Rescue Department personnel, are conducted by or under the supervision of a licensed health care professional in the Occupational Health

Center. All procedures within this segment will be implemented and maintained in compliance with regulations set forth in 29 CFR 1910.1030.

Communications of Hazards to Uniformed Fire and Rescue Department personnel. 29 CFR 1910.1030(g) dictates how a company should convey biological hazard information to employees. A summary of these requirements follows:

- warning labels shall be affixed to containers of regulated waste
- labels on these containers must include the international legend for “Biohazard”
- labels shall be fluorescent orange or orange-red
- labels shall be affixed as close as feasible to the container in a manner that prevents loss or unintentional removal

Training. The County must provide appropriate training to all potentially exposed fire and rescue personnel. Training schedule required is:

- initial training must be accomplished within 90 days of Control Plan’s effective date.
- new employees must be trained within 15 days of starting job and prior to being placed in positions where occupational exposure can occur.
- training will be annually thereafter, or at any time when there are modifications of new tasks or procedures.

The training program should include the following elements:

- a copy of the regulatory text of the standard and an explanation of its contents
- a general explanation of the modes of transmission of bloodborne pathogens
- an explanation of the exposure control plan
- an explanation of the appropriate methods for recognizing tasks that may involve exposure to potentially infectious materials
- information on PPE (such as types of equipment, procedures for proper use, location, decontamination procedures, disposal practices).

Record keeping. Mandatory record keeping requirements identified in the standard include:

- records on employee training to be maintained for one (1) year beyond the last date of employment of that employee
- records on information obtained during medical evaluations of employees

Service Line 3. Asbestos (29 CFR 1910.1001)

Definition and Purpose

The OSHA Asbestos Standard applies to all occupational exposures to asbestos in all industries covered by the Occupational Safety and Health Act.⁸ It is the intent of this standard to minimize health risks associated with asbestos exposure and to provide appropriate workplace and medical surveillance guidelines for individuals working in or otherwise exposed to an environment containing asbestos materials. Asbestos Control Plans should be developed for each FRD worksite where asbestos content has been identified and for workers who may be exposed to asbestos containing materials during emergency operations. The following section(s) outlines in summary form requirements for workplace and medical surveillance of the OSHA standard in its entirety.

Content

Workplace and medical surveillance requirements are:

Workplace Surveillance

Monitoring Requirements

1. All determinations of airborne concentrations of asbestos shall be made by the membrane filter method at 400-450x (magnification) (4 mm objective) with phase contrast illumination.
2. Every employer shall cause every place of employment where asbestos fibers are released to be monitored in such a way as to determine whether every employee's exposure to asbestos is below the PELs.
3. If the limits are exceeded, a compliance program shall be undertaken.

Personal Monitoring

4. Samples shall be collected from within the breathing zone of the employees, on membrane filters of 0.8 μ m porosity mounted in an open-face filter holder. Both TWA concentrations and ceiling concentrations shall be taken.
5. Sampling shall be done at intervals no greater than 6 mos for employees who may be exposed to asbestos in excess of the PEL.

⁸ Exceptions include ship repairing, shipbuilding and shipbreaking employments and related employments as defined in 29 CFR 1915.4. Exposure to asbestos in these employments is covered by 29 CFR 1915.191.

Personal Protective Requirements

1. The employer shall provide, and require the use of, special clothing, such as coveralls or similar whole body clothing, head coverings, gloves, and foot coverings for any employee exposed to airborne concentrations of asbestos which exceed the ceiling level.
2. Change rooms shall be provided at any fixed place of employment where concentrations of asbestos exceed the PELs.
3. Two separate lockers or containers shall be provided for each employee to prevent contamination of street clothes from work clothes.
4. Contaminated clothing shall be transported in sealed impermeable bags, or other closed, impermeable containers and labeled properly.
5. Laundry personnel shall be informed on how to handle asbestos-contaminated clothing to prevent the release of airborne asbestos fibers in excess of the exposure limits.

Respiratory Protection

6. Compliance with the exposure limits may not be achieved by the use of respirators or shift rotation of employees, except during the time period necessary to install engineering controls or institute work practices; in work situations in which the control measures are technically not feasible or feasible to an extent insufficient to reduce concentrations below the limits; or in emergencies.
7. Where both respirators and personnel rotation are allowed, and both are practicable, personnel rotation shall be preferred and used.
8. Where a respirator is permitted, it shall be selected from among those approved by the Bureau of Mines, or NIOSH.
- 9.a. A reusable or single use air purifying respirator or a respirator described in (b.) or (c.) of this subparagraph shall be used to reduce the concentrations of airborne asbestos fibers in the respirator below the exposure limits when the ceiling or the 8-hr TWA airborne concentrations of asbestos fibers are reasonable expected to exceed no more than 10 times those limits.
- 9.b. A full facepiece powered air purifying respirator, or a powered air purifying respirator, or a respirator described in subdivision (c.) Of this subparagraph, shall be used to reduce the concentrations of airborne asbestos fibers in the respirator below the exposure limits when the ceiling or the 8-hr TWA concentrations of asbestos fibers are reasonable expected to exceed 10 times those limits.
- 9.c. A type "C" continuous flow or pressure-demand, supplied-air respirator shall be used to reduce the concentrations of airborne asbestos fibers in the respirator below the exposure

limits when the ceiling or the 8-hr TWA airborne concentrations of asbestos fibers are reasonably expected to exceed 100 times those limits.

10. The employer shall establish a respirator program in accordance with the requirements of the American National Standards Practices for Respiratory Protection (ANSI 288.2-1969).
11. No employee shall be assigned to tasks requiring use of respirators if, based upon his/her most recent examination, the physician determines that the employee will be unable to function normally wearing a respirator, or that the health/safety of the employee or other employees will be impaired by his/her use of a respirator. Such employee shall be rotated to another job or given the opportunity to transfer to a different position whose duties he/she is able to perform with the same employer; in the same geographical area; and with the same seniority, status, and rate of pay he/she had just prior to such transfer, if such a different position is available.

Recordkeeping Requirements

1. Every employer shall maintain records of any personal or environmental monitoring for a period of at least 30 years post-employment.
2. Records shall be available to the Assistant Secretary of Labor for OSHA, the Director of NIOSH, and to authorized representatives of either.
3. Records shall be provided upon request to employees.
4. Any employee found to have been exposed to concentrations of asbestos in excess of the limits shall be notified in writing as soon as practicable, but not later than 5 days after the finding. The employee shall also be notified, in a timely manner, of the corrective action being taken.

Training.

Fairfax County Fire and Rescue personnel shall be trained in:

- proper use and maintenance of personal protective equipment (PPE), including use of respirators and their limitations
- identification of high-risk environments and appropriate procedures to limit/avoid exposure(s)
- appropriate exposure reporting methods

Training shall be conducted

- for all new employees before starting active duty and prior to being placed in positions where exposure can occur.

- training shall be annually thereafter, or at any time when there are modifications of new tasks or procedures or new equipment is introduced into the Department.

Training records shall remain the responsibility of the Training Academy.

Medical Surveillance

Pre-placement examinations shall be conducted for all fire and rescue applicants as job requirements place them at risk for exposure to airborne concentrations. A complete physical will be performed and will include:

- 14" x 17" post/ant chest x-ray;
- pulmonary functions tests (FVC, FEV 1.0)
- medical history, eliciting symptomology of respiratory diseases.

Periodic (annual) examinations shall be conducted for all fire and rescue incumbents who are subject to occupational exposure and will include, at a minimum, the same procedures listed in **pre-placement** requirements.

Separation examinations shall be conducted for any uniformed fire and rescue employee who experiences an exposure 30 days prior to or no more than 30 days after employment termination. Examination will include, at a minimum, the same procedures as pre-placement and periodic examinations.

Recordkeeping Requirements

1. Retain at least 30 years post-employment for all employees exposed.
2. Provide upon request to employee, designated medical representative, and the Assistant Secretary of Labor, as well as the Director of NIOSH.
3. Any physician who conducts a medical examination required by the OSHA Standard shall furnish to the employer of the examined employee all information specifically requested, and any other medical information related to occupational exposure to asbestos.

State Mandated Standards/Regulations

Definition and Purpose

Fairfax County strives to provide all employees with a safe and healthy work environment. In the case of fire and rescue personnel, this includes providing quality health care via the Occupational Health Center, ensuring that personal protective equipment designed for the task is available, and training personnel in proper use and maintenance of personal protective equipment. However,

even a first-class occupational health and safety program such as that provided by Fairfax County cannot provide 100 percent protection in all instances.

Consequently, firefighters may – due to the nature of the job – be unavoidably exposed to a wide range of toxic chemicals and known carcinogens which have been linked to a variety of cancers and possibly high job-related fatalities among firefighters. In recognition of this fact, the 1994 General Assembly requested that the Virginia Fire Services Board, within the Department of Fire Programs, conduct a study to determine the level of exposure of Virginia firefighters to toxic materials while performing the required duties of the fire service.

The results of the study indicate substantial support for the well-documented concerns of firefighter exposure to toxic substances. The study reinforces the claim that the exposures are a direct result of the job-related duties and that firefighters are taking the necessary steps to minimize the exposures by wearing appropriate personal protective clothing and equipment.

The Fairfax County Occupational Health and Safety Program is well aware of the danger of potential toxic exposure(s) for fire and rescue personnel and supports the efforts of the Commonwealth to establish better mechanisms to track incidents, monitor employees, and report all exposure incidents in a timely and efficient manner.

Service Line 1. Toxic Exposure Reporting. Commonwealth of Virginia, Department of Fire Programs

Definition and Purpose

House Joint Resolution No. 47, adopted by the 1992 Session of the General Assembly, established a joint subcommittee to study the increased mortality rate and the increased rate of certain types of cancer among firefighters. The resolution directed the subcommittee to review work-related health risks and to examine presumptive cancer laws in other states “to determine if such legislation would be beneficial to the citizens of the Commonwealth.” The 1993 Session of the General Assembly authorized the continuation of the study pursuant to HJR 428 (*Report to the Joint Subcommittee Studying Increased Mortality and Cancer Rates Among Firefighters in the Commonwealth*, House Document No. 88, 1994). Recommendations offered in this document are:

Recommendation 1: *That the Virginia Workers’ Compensation Act be amended to provide presumptive coverage for firefighters whose death or disability results from certain types of cancer.*

Recommendation 2: *That the Virginia Fire Services Board develop criteria for local and volunteer fire departments in reporting firefighter exposure to hazardous substances and establish a database for the collection of this information within the Department of Fire Programs.*

In support of these recommendations, the 1994 General Assembly requested that the Virginia Fire Services Board, within the Department of Fire Programs, study the level of exposure of firefighters to toxic materials while performing the required duties of the fire service. The request for study recognized the fact that, nationally, firefighters are unavoidably exposed to a wide range of toxic chemicals and known carcinogens, which have been linked to a variety of cancers and possibly high job-related fatalities among firefighters. The request also acknowledged that a need exists for capturing Virginia-specific data on toxic exposures.

The Committee defined the overall scope of this study to be the design of a prototype database environment to collect and report toxic exposure incidents. A form was designed to collect the required data (Appendix D. Commonwealth of Virginia, Department of Fire Programs, **Fire Service Exposure Report**). Data were collected during a two month interval from six fire departments, including Fairfax County. The consensus of the group indicates that this data collection effort is vital and was received well by the firefighters responsible for completing the form. There is minimal duplication of data collected within the Virginia Fire Incident Reporting System (VFIRS) and any identified unnecessary duplicity of effort will be overcome when the module is approved and fully incorporated into the VFIRS system.

The results of the study indicate substantial support for the concerns of firefighter exposure to toxic substances. The study reinforces the claim that exposures are a direct result of job-related duties and that firefighters are taking the necessary steps to minimize exposures by wearing appropriate personal protective clothing and equipment. Recommendations of the study are:

“The Virginia Fire Services Board and the Department of Fire Programs recommends that the agency begin migrating the toxic exposure module into the current VFIRS system ...”

This recommendation clearly demonstrates the intent of the Commonwealth to continue toxic exposure reporting requirements and to expand the requirements to encompass all fire departments in the Commonwealth.

Content

Reporting Requirements. In support of and compliance with **Senate Joint Resolution No. 120** (*Requesting the Virginia Fire Services Board to develop and maintain a statewide database for the collection and analysis of information documenting firefighter exposure to toxic substances*, 1994), the Fairfax County Fire and Rescue Department will continue to report all exposure incidents to the Commonwealth of Virginia, Department of Fire Programs, using the State-designed Fire Service Exposure Report.

Additionally, all Fairfax County fire and rescue personnel must report these incidents to the Occupational Health Center via the Fairfax County Fire & Rescue Department Exposure Report (Form FSA 316). This form is included in the Plan as Appendix E.

Reporting/Record keeping Procedures. The Fairfax County Fire and Rescue Department Occupational Health and Safety Program requires that both State and County exposure report

forms be completed and provided to appropriate Occupational Health Center personnel within 48 hours of the incident. Forms may be completed by either individual fire fighters or by the Station supervisor on duty at the time. Occupational Health Center personnel then review both forms for accuracy/completeness. The State form is forwarded to the State Department of Fire Programs; the County form is entered into the OHC management information system.

The Fairfax County Fire and Rescue Department Occupational Health and Safety Program is reviewing the feasibility of providing modem-equipped personal computers to all County fire stations to facilitate provision of these forms to the OHC. Automated transfer of forms will be accomplished via a secured network. Stations providing forms electronically will only be able to “send” information; entry into the Center’s management information system will be blocked to ensure confidentiality/privacy of other medical information stored in this system.

Medical Surveillance. Baseline medical information collected during pre-employment and routine physical examinations will provide the platform for the FRD OHSP toxic exposure medical surveillance program. All toxic exposure reports received in the OHC will be reviewed by the Fire and Rescue Department physician. Requirements for immediate medical attention for reported exposures will be assessed on a case-by-case basis. Periodic (at least annual) evaluations of all fire and rescue personnel who have filed toxic exposure reports with the Occupational Health Center will be conducted.

Fire and rescue personnel reporting exposure(s) to agents specifically addressed in other regulations (i.e., asbestos, etc.) will receive medical evaluations/follow-up in accordance with guidelines provided in these regulations.

Industry Standards

Definition and Purpose

The National Fire Protection Association (NFPA) is an international nonprofit organization with a membership of approximately 68,000 individuals and more than 100 organizations in the United States, Canada and 70 other countries. The mission of the National Fire Protection Association (NFPA) is “to reduce the burden of fire on the quality of life by advocating scientifically-based consensus codes and standards, research, and education for fire and related safety issues.”

Nearly one-third of the 300 codes and standards in NFPA’s *National Fire Codes* deal directly or indirectly with fire service issues. The Fairfax County Fire and Rescue Department Occupational Health and Safety Program supports the mission of the NFPA and remains abreast of changes in NFPA codes and standards to ensure Department compliance. NFPA codes/standards directly applicable to the FRD OHSP are:

NFPA STANDARDS APPLICABLE TO THE FIRE AND RESCUE DEPARTMENT OCCUPATIONAL HEALTH AND SAFETY PROGRAM	
NFPA 471	Responding to Hazardous Materials Incidents
NFPA 472	Professional Competence of Responders to Hazardous Materials Incidents
NFPA 473	Competencies for EMS Personnel Responding to Hazardous Materials Incidents
NFPA 1404	Fire Department Self-Contained Breathing Apparatus (SCBA) Program
NFPA 1500	Fire Department Occupational Safety and Health Programs
NFPA 1521	Fire Department Safety Officers
NFPA 1581	Fire Department Infection Control Programs
NFPA 1582	Medical Requirements for Fire Fighters
NFPA 1981	Open-Circuit Self-Contained Breathing Apparatus for Fire Fighters
NFPA 1999	Protective Clothing for Emergency Medical Operations

Service Line 1. NFPA 471. Responding to Hazardous Materials Incidents.

Definition and Purpose

This recommended practice applies to all organizations that have responsibilities when responding to hazardous materials incidents and recommends standard operating guidelines for responding to such incidents. Planning procedures, policies, and application of procedures for incident levels, personal protective equipment, decontamination, safety, and communications are specifically covered in this recommended practice.

The purpose of this document is to outline the minimum requirements that should be considered when dealing with responses to hazardous materials incidents and to specify operating guidelines for responding to hazardous materials incidents. *(It is not the intent of this standard to restrict any jurisdiction from using more stringent guidelines).*

Content

Basic requirements of this standard applicable to the Fairfax County Fire and Rescue Department Occupational Health and Safety Program are provided in Table 6-1.

Service Line 2. NFPA 472. Hazardous Materials Incident Responders Professional Competencies

Definition and Purpose

This standard identifies the levels of competence required of responders to hazardous materials incidents. It specifically covers the competencies for first responders at the awareness level, first responders at the operational level, hazardous materials technicians, incident commanders, hazardous materials branch officers, hazardous materials branch safety officers, and other specialist employees.

The purpose of this standard is to specify minimum competencies for those who will respond to hazardous materials incidents. *(It is not the intent of this standard to restrict any jurisdiction from using more stringent guidelines).*

Content

Basic requirements of this standard applicable to the Fairfax County Fire and Rescue Department Occupational Health and Safety Program are provided in Table 6-2.

Service Line 3. NFPA 473 Competencies for EMS Personnel Responding to Hazardous Materials Incidents

Definition and Purpose

This standard identifies the levels of competence required of emergency medical services (EMS) personnel who respond to hazardous materials incidents. It specifically covers the requirements for basic life support and advanced life support personnel in the pre-hospital setting.

The purpose of this standard is to specify minimum requirements of competence and to enhance the safety and protection of response personnel and all components of the emergency medical services system. *(It is not the intent of this standard to restrict any jurisdiction from using more stringent guidelines).*

Content

Basic requirements of this standard applicable to the Fairfax County Fire and Rescue Department Occupational Health and Safety Program are provided in Table 6-3.

Service Line 4. NFPA 1404. Fire Department Self-Contained Breathing Apparatus (SCBA) Program

Definition and Purpose

This standard contains minimum requirements for a fire service respiratory protection program. These requirements are applicable to organizations providing fire suppression, fire training, rescue and respiratory protection equipment training, and other emergency services including public, military, and private fire departments and fire brigades.

The purpose of this standard is to specify the minimum requirements of a respiratory protection program for an emergency response organization. These include safety procedures for those involved in fire suppression, rescue, and related activities in a toxic or contaminated environment.

Content

Basic requirements of this standard applicable to the Fairfax County Fire and Rescue Department Occupational Health and Safety Program are provided in Table 6-4.

Service Line 5. NFPA 1500. Standard on Fire Department Occupational Safety and Health Programs

Definition and Purpose

The purpose of this standard is to specify: (1) minimum requirements for a fire department occupational safety and health program, and (2) safety guidelines for members involved in rescue, fire suppression, emergency medical services, hazardous materials operations, special operations, and related activities.

Content

Basic requirements of this standard applicable to the Fairfax County Fire and Rescue Department Occupational Health and Safety Program are provided in Table 6-5.

Service Line 6. NFPA 1521. Standard for Fire Department Safety Officer

Definition and Purpose

The purpose of this standard is to specify minimum requirements for a fire department health and safety officer and an incident safety officer.

Content

Basic requirements of this standard applicable to the Fairfax County Fire and Rescue Department Occupational Health and Safety Program are provided in Table 6-6.

Service Line 7. NFPA 1581. Fire Department Infection Control Programs

Definition and Purpose

This standard contains minimum requirements for a fire department infection control program. Requirements are applicable to organizations providing fire suppression, rescue, emergency medical care, and other emergency services including public, military, private, and industrial fire departments.

The purpose of this standard is to provide minimum criteria for infection control in the fire station, at an incident scene, and at any other area where fire department members are involved in routine or emergency operations. The requirements of this standard are intended to meet or exceed applicable Federal regulations of OSHA and guidelines of the CDC.

Content

Basic requirements of this standard applicable to the Fairfax County Fire and Rescue Department Occupational Health and Safety Program are provided in Table 6-7.

Service Line 8. NFPA 1582. Standard on Medical Requirements for Fire Fighters

Definition and Purpose

The purpose of this standard is to specify minimum medical requirements for candidates and current fire fighters.

Content

Basic requirements of this standard applicable to the Fairfax County Fire and Rescue Department Occupational Health and Safety Program are provided in Table 6-8.

Service Line 9. NFPA 1981. Open-Circuit Self-Contained Breathing Apparatus for Fire Fighters

Definition and Purpose

The purpose of this standard is to provide minimum requirements for open-circuit SCBA designed to provide respiratory protection for the wearer from the products of combustion, hazardous or

toxic atmospheres, oxygen-deficient atmospheres, particulate, and other such immediately dangerous to life and health (IDLH) atmospheres that might exist at the scene of an emergency.

Content

Basic requirements of this standard applicable to the Fairfax County Fire and Rescue Department Occupational Health and Safety Program are provided in Table 6-9.

Service Line 10. NFPA 1999. Protective Clothing for Emergency Medical Operations

Definition and Purpose

This standard specifies minimum documentation, design criteria, performance criteria, and test methods for emergency medical clothing, including garments, gloves, and face protection devices, designed to protect emergency medical service personnel or victims and patients from exposure to liquid-borne pathogens during emergency medical operations. It does not apply to protective clothing for any fire fighting application.

The purpose of this standard is to provide minimum requirements for emergency medical garments, gloves, face protection devices designed to minimize skin exposure to liquid-borne pathogens under the various conditions that might exist at the scene of an emergency. It is not the purpose of this standard to provide criteria for protection from biological agents that are not liquid borne.

Content

Basic requirements of this standard applicable to the Fairfax County Fire and Rescue Department Occupational Health and Safety Program are provided in Table 6-10.

The Fairfax County OHSP has established medical standards which were approved by the Board of Supervisors. These standards will be used by contract health care providers working in the Occupational

Health Center. Additional standards addressing topics such as ethics, confidentiality, disability duration guidelines, employee medical folder systems, etc. will be developed and implemented within the Program.

Component 7- ***Program Standards & Guidelines***

Objective

It is the intent of the Fairfax County Fire and Rescue Department Occupational Health and Safety Program to develop Department-specific standards and guidelines for use by contract and County personnel. These internal standards and guidelines will clearly define accepted Departmental procedures and/or practices for ensuring the safety and health of fire and rescue personnel and for assuring the administrative and managerial integrity of the Program.

COMPONENT 7. PROGRAM STANDARDS AND GUIDELINES - Major Program Elements -
<ul style="list-style-type: none">● Medical Standards● Ethics/Medical Information Confidentiality

Medical Standards

Definition and Purpose

Fire and rescue personnel regularly engage in arduous activities that require physical strength and endurance and mental agility. They must be able to respond to emergency situations in an appropriate manner, assimilate and comprehend information rapidly and communicate concisely with others. The FRD OHSP, in recognition of these requirements, has developed a set of medical guidelines intended to aid the Department physician in making judgments concerning the suitability of individuals for positions as fire and rescue personnel.

These guidelines were developed by a task force of medical specialists (cardiologists, neurologists, etc.) who evaluated the requirements of the essential tasks within this job in relation to specific diseases and conditions in each body system. Recommendations were made regarding the degree of impairment for each disease or condition that would be likely to preclude

an individual from safely and effectively performing the job requirements of fire and rescue personnel.

Service Line 1. Medical Guidelines for Firefighters

Definition and Purpose

To provide a statement of job-related expectations associated with physiologic, physical, cognitive, and emotional function which are defensible representations of medical impairments that impact functional requirements for performing the essential duties of the position of uniformed Fire and Rescue Department personnel.

Objectives

Objectives of the Fairfax County Occupational Health and Safety Program Medical Standards are to have:

- a set of medical standards which are job-related and define the level of severity of a condition that impacts the essential functions and duties of a uniformed Fire and Rescue Department personnel and which will allow for the fair, consistent and equitable evaluation, qualification/disqualification, or accommodation of uniformed Fire and Rescue Department personnel.
- a staff of professional health care providers who understand and can effectively interpret and apply such standards.
- a group of professional uniformed Fire and Rescue Department personnel who, in spite of certain impairments, are able to fulfill job duties without significant risk to themselves, their colleagues, or community residents.
- accepted procedural instruments which will minimize liability of inappropriately certifying or disqualifying fire and rescue department personnel.

Content

The Fairfax County Fire and Rescue Service Occupational Health and Safety Program has defined the essential duties, functional requirements, tasks, and working environment associated with job performance of fire and rescue personnel. This data has been linked to the disease/illness-related impairments that may impact fire and rescue personnel's ability to successfully and safely perform job tasks.

In addition, the NFPA has established more generic guidelines to be used in evaluating the abilities needed by uniformed Fire and Rescue Department personnel to effectively and safely perform their duties. These standards have been defined for use by professionals involved in the medical and mental health assessment of fire department personnel.

Ethics/Medical Information Confidentiality

Definition and Purpose

Technological innovations in computerized recordkeeping systems, especially those designed for medical record storage, bring with them the need to reassess policies and procedures designed to ensure ethical and confidential handling of medical information. This topic is one of great interest to the Federal government and to Congress and debates regarding the necessary and acceptable components of a Federal preemptive health information privacy and confidentiality law will resume later this year (1997)⁹.

The Occupational Health and Safety Administration and the Virginia Code provide guidance regarding confidentiality, access, and retention of medical records but they do not address electronic entry, access and storage. Standards and guidelines provided by OSHA and the Commonwealth will be observed by the OHSP, but additional guidelines addressing automation-specific issues are required.

Service Line 1. Electronic Medical Information Confidentiality

Definition and Purpose

To develop well-controlled and appropriate confidentiality and medical privacy principles within the County of Fairfax Fire and Rescue Department Occupational Health and Safety Program (OHSP), and to establish fail-safe security measures for implementation in the OHSP Occupational Health Center Management Information System which will prevent unauthorized access to fire and rescue personnel medical records.

Content

The County of Fairfax OHSP intends to follow on-going political debates and establish a formal written operating procedure and training program based on the outcome. In the interim, the OHSP will follow relevant "Policy Principles for Effective Medical Privacy Management" developed in **draft** form by the Koop Foundation's Health Information Infrastructure Consortium (HII).

The Health Information Infrastructure Consortium consists of a group of leaders in health care, technology, large employers, and government. The HII has spent the past three years working toward development of a "nervous system" or health information infrastructure for the U.S. health care system. Toward this end, they have developed a list of Draft Privacy Principles and are soliciting comment(s) from interested parties. It should be noted that the Koop Foundation is not endorsing the principles listed in the draft document. It is, instead, remaining a neutral party and

⁹The National Committee for Vital and Health Statistics (NCVHS) concluded public hearings on these issues in March 1997. Their recommendations will be forwarded to the Secretary of Health and Human Services. It is anticipated that Health and Human Services will forward their recommendations to Congress in August 1997.

soliciting additional comments to facilitate debate. The six overarching privacy themes in the United States, as identified by the HII, and the 17 draft principles are provided below. Please note that these materials are still in draft form and are intended for information purposes only.

**The Koop Foundation, Incorporated
Health Information Infrastructure Consortium
Action Team**

*Policy Principles for
Effective Medical Privacy Management*

Overarching Themes

Below is a list of six overarching privacy themes in the United States followed by what is now a list of seventeen of the most commonly articulated medical privacy principles, in draft form.

- 1) In the U.S., the warranty of personal privacy is a right, and the ability to keep information about oneself confidential is an extension of that right;
- 2) Individuals must have clear and concrete mechanisms enabling them to control the disclosure;
- 3) Individuals must be made fully aware of, in order to help them fully understand, how private or confidential information about them may be used;
- 4) If private or confidential information about individuals is to be disseminated, entities that transmit, collect, and use the information must work cooperatively with affected individuals in determining how the information is transmitted and used;
- 5) Methods used to store and transmit private and confidential information must be secure;
- 6) Individuals who are harmed by the misuse of private or confidential information about them must have available to them appropriate avenues of civil or criminal redress.

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*Policy Principles for
Effective Medical Privacy Management*

Draft Privacy Principles

- 1) Public and private efforts directed toward full computerization of health care administrative and clinical data systems must be supported and aggressively pursued.
- 2) Individuals have a right to privacy with respect to their health information, which includes the right to determine who may have access to personally identifiable information and for what purpose.
- 3) Entities collecting personal health information from an individual must provide the individual with pertinent, adequate knowledge of why the information is being collected, how it is expected to be used, how it will be protected, and what will happen if it is not collected. Individuals providing health information must understand the remedies available to them if they are harmed by mismanaged or misused information.
- 4) Individuals must be able to control the disclosure and use of their personal health information. Fully informed consent must be obtained prior to the use and disclosure of personal health information. Informed consent may include limitations on the period of time for which authorization of disclosure is given.
- 5) Patients and health care providers should be allowed to jointly establish that portions of an individual's complete health record will not be stored or managed electronically.
- 6) An individual's health information should be used or disclosed only as authorized by the patient; or for research and quality assessment or improvement provided that personal identifiers have been removed; or for public health reporting as required by law or for enforcement of the financial integrity of publicly funded programs provided that personal identifiers have been removed wherever possible. Such uses or disclosures for reporting and enforcement should occur only in very limited circumstances where a clear public need has been identified and the need for personally identifiable information has been established and cannot be met by other means and, after careful scrutiny, has been found to justify the use or disclosure.
- 7) Individuals must have a right of timely access to the information in their own health records, the authority to amend the records, and the right to copy the records.
- 8) In any health information data system, protection of the individual right to privacy must be a primary objective. Individuals should retain their right to choose to remain anonymous.

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*Policy Principles for
Effective Medical Privacy Management*

Draft Privacy Principles (Continued)

- 9) Comprehensive, nationally-applicable safeguards must be developed to manage the collection, use, and disclosure of personal health information. Minimum standards for health information privacy and confidentiality would best be established through a single federal law applicable to the entire health care system.
- 10) Law establishing national health information privacy and confidentiality standards should include provisions requiring public-private development and adoption of standards for the safeguarding of electronic transmission, storage, and validation of patient information.
- 11) National privacy and confidentiality standards should include provisions to allow the necessary interchange of patient-identifiable information among health care providers in order to assure the most effective and efficient delivery of the highest quality health care services.
- 12) The data systems used to electronically manage individuals' health information must be proven to be secure; protected from failures of data integrity, availability, and confidentiality. These data systems must provide documentation of data access authorizations, uses, and disclosures.
- 13) Employers should not be allowed to require access to the information in a person's health record as a condition of: employment; continued employment; or the availability of employee benefits.
- 14) Uniform, comprehensive conditions of access and maintenance of privacy and confidentiality must apply to all entities allowed access to health information. Meaningful civil penalties must be available, and criminal sanctions imposed, for all violations of health information privacy and confidentiality standards.
- 15) National health information privacy and confidentiality law must include provisions for an individual's private right of action in cases where the individual's health information has been mismanaged.
- 16) Laws establishing privacy and confidentiality standards for health information should not undertake to diminish existing constitutional and statutory limitations on access to information, communications, and transactions such as requirements for warrants and subpoenas. A warrant requirement applying to law enforcement access to individual health records must be created through legislation.
- 17) There must be not health information record-keeping systems whose very existence is secret.

Using the 17 Privacy Principles¹⁰ as a platform and/or guideline, the Fairfax County Occupational Safety and Health Program standards for medical information confidentiality include:

- County of Fairfax fire and rescue personnel will be provided information regarding the Occupational Health Center Management Information System, including notification of what health information is to be stored in this system. Should an individual's occupational health records be required for use by anyone outside the OHC (Risk Management, specialists, etc.), the individual will be informed of this request and written permission obtained.
- Occupational Health Center personnel who are authorized to use the MIS must provide fire and rescue personnel with pertinent, adequate knowledge of why the information is being collected, how it is expected to be used, how it will be protected, and what will happen if it is not collected. Fire and rescue personnel must understand the remedies available to them if they are harmed by mismanaged or misused information.
- Fire and rescue personnel must be able to control the disclosure and use of their personal health information. Fully informed consent must be obtained prior to the use and disclosure of personal health information.
- Health information to be stored in the OHC MIS will not include any data regarding Employee Assistance Program usage. EAP records are separate and apart from the OHC MIS and are the sole responsibility of the County's contracted EAP provider.
- Fire and rescue workers' health information should be used or disclosed only as authorized by the employee; or for research and quality assessment or improvement provided that personal identifiers have been removed; or for public health reporting as required by law or for enforcement of the financial integrity of publicly funded programs provided that personal identifiers have been removed wherever possible.
- Fire and rescue personnel will have a right of timely access to the information in their own health records, the authority to amend the records, and the right to copy the records.

¹⁰"Overarching Themes" and "Draft Privacy Principles" are reprinted in this document via permission from The Koop Foundation, Incorporated. This information is the property of The Koop Foundation and is provided herein in its current draft form. Information may not be reproduced or distributed without prior written permission from The Koop Foundation.

- Procedures for the OHC MIS, when fully operational, will include safeguards to manage the collection, use, and disclosure of personal health information. Minimum standards for health information privacy and confidentiality will be established within the OHSP.

The County will remain abreast of current political debates and abide by any federal laws enacted which are applicable to the Program.

- The OHSP will develop standards outlining procedures for the necessary interchange of patient-identifiable information among health care providers (specialists) in order to assure the most effective and efficient delivery of the highest quality health care services.
- The OHC MIS must be proven to be secure; protected from failures of data integrity, availability, and confidentiality. The OHC MIS must provide documentation of data access authorizations, uses, and disclosures.
- The County should not be allowed to require access to the information in uniformed fire and rescue workers' health records as a condition of: employment; continued employment; or the availability of employee benefits.

As with any program or service, its evaluation as to effectiveness, efficiency and performance is paramount to ensure stated goals and objectives are achieved and to ensure continuous

improvement. The Occupational Health and Safety Program has seven operational components, each with “major elements” containing multiple “service lines,” or tasks. As detailed in each of the lines of service profiles, an objective has been developed. Due to the nature of the services provided by the OHSP, only a select number of service lines lend themselves to direct performance measurement.

Component 8- ***Performance Evaluation***

Objective

To develop Program-wide objectives which relate to the stated goals of the Occupational Health and Safety Program.

Narrative

The following objectives and corresponding performance measures were developed to provide managerial oversight to the OHSP. These objectives and measures may be modified over time to reflect availability and meaningfulness of data collected from the operational components. The performance targets will be evaluated as required to reflect industry standards and actual OHSP experience.

Objective

1. Minimize the incidence of injuries¹¹.

(A) Measure: Number of injuries by category

RELATED TO:*	FY 1995	FY 1996	FY 1997	Baseline	FY 1998 Target
Physical Fitness Training					
Incidents					
Training					
Other					

**FRD to confirm "related to" categories*

Source of Data: PRISM/Risk Management

(B) Measure: Average number of hours of lost work time per injury

	FY 1995	FY 1996	FY 1997	Baseline	FY 1998 Target
Lost hours per injury					

Source of Data: PRISM/Risk Management/F.D. Safety Section/FAMIS

© Measure: Average workers' compensation cost per injury.

	FY 1995	FY 1996	FY 1997	Baseline	FY 1998 Target
Cost per injury*					

*Cost includes medical expenses, injury leave and overtime associated with injuries as defined.

Source of Data: Risk Management

¹¹An injury is defined as a compensable injury which may or may not result in lost work time.

Objective

2. Maintain regulatory compliance for employee health and safety issues.

(A) Measure: Sustained regulatory compliance complaints

Federal* Regulatory Compliance	FY 1995	FY 1996	FY 1997	Baseline	FY 1998 Target
Level 1					
Level 2					
Level 3					
Total					

State* Regulatory Compliance	FY 1995	FY 1996	FY 1997	Baseline	FY 1998 Target
Level 1					
Level 2					
Level 3					
Total					

**FRD to confirm Federal and State compliance categories*

(B) Measure: Percent of reported exposures where documented safety procedures were followed and personal protective devices were utilized (could be shown as fraction).

	FY 1995	FY 1996	FY 1997	Baseline	FY 1998 Target
Exposure* incidents where proper procedures, equipment and reporting were utilized					

FRD to define "exposure"

Source of Data: OHC Contractor/F.D. Safety Section

Objective

3. Ensure uniform personnel are physically able to perform assigned duties.

- (A) Measure: Percent of uniform personnel meeting the Work Performance Evaluation minimum completion time.

	FY 1995	FY 1996	FY 1997	Baseline	FY 1998 Target
Percent of uniform personnel meeting the Work Performance Evaluation minimum completion time					

Source of Data: Fitness Coordinator

- (B) Measure: Average Departmental completion time for the Work Performance Evaluation.

	FY 1995	FY 1996	FY 1997	Baseline	FY 1998 Target
Average Departmental completion time for the Work Performance Evaluation					

Source of Data: Fitness Coordinator

- © Measure: Average Departmental . . . *FRD to develop physical fitness criteria (BP, OV ...)*

	FY 1995	FY 1996	FY 1997	Baseline	FY 1998 Target
Average Department ...					
Average Department ...					
Average Department ...					

Objective

4. Maintain a safe work environment (*FRD to fully “flesh out” wording*)

FRD to develop measures (preventable vehicle accidents)

APPENDICES

Appendices to the Plan include summaries of memorandums of understanding directly applicable to the conduct of Program activities, and other material deemed necessary for personnel working within the Program and the County. As with any program or service, its evaluation as to effectiveness, efficiency and performance is paramount to ensure stated goals and objectives are achieved and to ensure continuous improvement.

Appendices included in this first edition of the Plan are:

Appendix A. Fairfax County Fire and Rescue Department Infectious Disease Exposure Report (FSA 314) and Personal Injury Packet

Appendix B. Memorandum of Understanding: "Responsibilities and authority of the Risk Management Division and the Fire and Rescue Department relative to work-related lost time injuries and/or those resulting in the need for transitional duty."

Appendix C. Risk Management Manual, Section CL-1-87:
Claim Reporting Procedures

Appendix D. Safety Officer Inspection Guideline:
Personal Protective Equipment

Appendix E. Commonwealth of Virginia, Department of Fire Programs
Fire Service Exposure Report (VFSE 05/95)

Appendix F. Fairfax County Fire & Rescue Department
Exposure Report (FSA 316)